

16

SEQUENCE LISTING

<110> PLOWMAN, GREGORY  
WHYTE, DAVID  
CAENEPEEL, SEAN  
CHARYDCZAK, GLEN  
MANNING, GERARD  
SUDARSANAM, SUCHA



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<140> 09/888,615

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<150> 60/214,047

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&lt;210&gt; 26

&lt;211&gt; 888

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 26

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&lt;210&gt; 27

&lt;211&gt; 1887

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 27

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 <213> Homo sapiens

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 <213> Homo sapiens

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 <212> DNA  
 <213> Homo sapiens

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 <212> DNA  
 <213> Homo sapiens

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 <213> Homo sapiens

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 <213> Homo sapiens

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 <213> Homo sapiens

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 <212> DNA  
 <213> Homo sapiens

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 <212> DNA  
 <213> Homo sapiens

<400> 57  
 atcgggggccc acgagggtgac cccccactcc agggccctaca tggcatccgt gcgcttcggg 60  
 ggccaaatcc actgcggagg ctccctgtc cgagcccgct gggtggcttc ggccggccag 120  
 tgcttcagcc acagg 135

<210> 58  
 <211> 138  
 <212> DNA  
 <213> Homo sapiens

<400> 58  
 ggagattctg gggggccctt ggtctgtgaa ttaaatggca catgggtcca ggtggggatt 60  
 gtgagctggg gcattggctg cggtcgccaa ggataccctg gagtttacac agaagtttagt 120  
 ttctacaaga aatggatt 138

<210> 59  
 <211> 930  
 <212> DNA  
 <213> Homo sapiens

<400> 59  
 atggcaggag aacaggtcac cgccaaatgtc agcagatacc ctggacagaa aacgatgtcc 60  
 tttctgaaa aaacatttct ctttcttat agagcatcac tccttgctgt tgtaacacac 120

agatccaata atagtcgtgg gcgagcttt gagagtcagg ttcttccga tttgacagca 180  
 ggggaccccg cagacccccc aattcctccc ttgggtcctg gagctgcact tctgaagtct 240  
 ggtcccttca gatatctggca gggggtaag accaaaggag aggaggggga cagagacacg 300  
 ggcactgtcg gctatgcatt cacgctgctc cttctgtgg ggatttcggg tgagccccc 360  
 gaatgggtct gtgggcccac cacagtctca tctggtattt cctcaggctt gggggctagt 420  
 gtggggcagt ggccctggca ggtcagcatc cggcagggtc tgattcacgt ctgctcagat 480  
 accctcatct cagaggagtg ggtgctgaca gtggcgatct gcttcccatt atccccccac 540  
 cctgatttcc aagcaaacac atctagtgcc atcgctgtgg tagaactgcc ctccccagg 600  
 tctgttagcc ctgtgtcct gctcatctgc ctccctcat ctgaagtcta cctgaagaag 660  
 aataacaacct cctgctgggt gactggatgg ggctatactg gaatattcca atatatcaag 720  
 cggttcttata cactgaagga gctgaaaatgt cccctcattt atctccagac atgcgggtgac 780  
 cactatcaa atgaaaatctt gctgcacgga gttagtca tcatactgta agctatgatc 840  
 tgctccaaggc tcccagtggg gcagatggat cagtgtactg taagaatcca cccctcaggc 900  
 acctttcaca ggccttgcct tccccagtg 930

&lt;210&gt; 60

&lt;211&gt; 315

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 60

Met	Lys	Cys	Leu	Gly	Lys	Arg	Arg	Gly	Gln	Ala	Ala	Ala	Phe	Leu	Pro
1															15

Leu	Cys	Trp	Leu	Phe	Leu	Lys	Ile	Leu	Gln	Pro	Gly	His	Ser	His	Leu
															30
							20				25				

Tyr	Asn	Asn	Arg	Tyr	Ala	Gly	Asp	Lys	Val	Ile	Arg	Phe	Ile	Pro	Lys
															45
							35			40					

Thr	Glu	Glu	Glu	Ala	Tyr	Ala	Leu	Lys	Lys	Ile	Ser	Tyr	Gln	Leu	Lys
															60
							50			55					

Val	Asp	Leu	Trp	Gln	Pro	Ser	Ser	Ile	Ser	Tyr	Val	Ser	Glu	Gly	Thr
															80
							65			70					

Val	Thr	Asp	Val	His	Ile	Pro	Gln	Asn	Gly	Ser	Arg	Ala	Leu	Ala	
															95
							85			90					

Phe	Leu	Gln	Glu	Ala	Asn	Ile	Gln	Tyr	Lys	Val	Leu	Ile	Glu	Asp	Leu
															110
							100			105					

Gln	Lys	Thr	Leu	Glu	Lys	Gly	Ser	Ser	Leu	His	Thr	Gln	Arg	Asn	Arg
															125
							115			120					

Arg	Ser	Leu	Ser	Gly	Tyr	Asn	Tyr	Glu	Val	Tyr	His	Ser	Leu	Glu	Glu
															140
							130			135					

Ile	Gln	Asn	Trp	Met	His	His	Leu	Asn	Lys	Thr	His	Ser	Gly	Leu	Ile
															160
							145			150					

His	Met	Phe	Ser	Ile	Gly	Arg	Ser	Tyr	Glu	Gly	Arg	Cys	Leu	Phe	Ile
															175
							165			170					

Leu	Lys	Leu	Gly	Arg	Arg	Ser	Arg	Leu	Lys	Arg	Ala	Val	Trp	Ile	Asp
															190
							180			185					

Cys Gly Ile His Ala Arg Glu Trp Ile Gly Pro Ala Phe Cys Gln Trp  
 195 200 205

Phe Val Lys Glu Ala Leu Leu Thr Tyr Lys Ser Asp Pro Ala Met Arg  
 210 215 220

Lys Met Leu Asn His Leu Tyr Phe Tyr Ile Met Pro Val Phe Asn Val  
 225 230 235 240

Asp Gly Tyr His Phe Ser Trp Thr Asn Asp Arg Phe Trp Arg Lys Thr  
 245 250 255

Arg Ser Arg Asn Ser Arg Phe Arg Cys Arg Gly Val Asp Ala Asn Arg  
 260 265 270

Asn Trp Lys Val Lys Trp Cys Gly Lys Phe Gly Thr Asn Trp Asp Pro  
 275 280 285

Asp Pro Lys Val Ser Ala Gly Phe Thr Leu Gln Asn Met Ser Pro Glu  
 290 295 300

Asp Ser His Gly Arg Leu Met Phe Phe Cys Met  
 305 310 315

<210> 61

<211> 374

<212> PRT

<213> Homo sapiens

<400> 61

Met Lys Pro Leu Leu Glu Thr Leu Tyr Leu Leu Gly Met Leu Val Pro  
 1 5 10 15

Gly Gly Leu Gly Tyr Asp Arg Ser Leu Ala Gln His Arg Gln Glu Ile  
 20 25 30

Val Asp Lys Ser Val Ser Pro Trp Ser Leu Glu Thr Tyr Ser Tyr Asn  
 35 40 45

Ile Tyr His Pro Met Gly Glu Ile Tyr Glu Trp Met Arg Glu Ile Ser  
 50 55 60

Glu Lys Tyr Lys Glu Val Val Thr Gln His Phe Leu Gly Val Thr Tyr  
 65 70 75 80

Glu Thr His Pro Met Tyr Tyr Leu Lys Ile Ser Gln Pro Ser Gly Asn  
 85 90 95

Pro Lys Lys Ile Ile Trp Met Asp Cys Gly Ile His Ala Arg Glu Trp  
 100 105 110

Ile Ala Pro Ala Phe Cys Gln Trp Phe Val Lys Glu Ile Leu Gln Asn  
 115 120 125

His Lys Asp Asn Ser Ser Ile Arg Lys Leu Leu Arg Asn Leu Asp Phe  
 130 135 140

Tyr Val Leu Pro Val Leu Asn Ile Asp Gly Tyr Ile Tyr Thr Trp Thr  
 145 150 155 160  
 Thr Asp Arg Leu Trp Arg Lys Ser Arg Ser Pro His Asn Asn Gly Thr  
 165 170 175  
 Cys Phe Gly Thr Asp Leu Asn Arg Asn Phe Asn Ala Ser Trp Cys Ser  
 180 185 190  
 Ile Gly Ala Ser Arg Asn Cys Gln Asp Gln Thr Phe Cys Gly Thr Gly  
 195 200 205  
 Pro Val Ser Glu Pro Glu Thr Lys Ala Val Ala Ser Phe Ile Glu Ser  
 210 215 220  
 Lys Lys Asp Asp Ile Leu Cys Phe Leu Thr Met His Ser Tyr Gly Gln  
 225 230 235 240  
 Leu Ile Leu Thr Pro Tyr Gly Tyr Thr Lys Asn Lys Ser Ser Asn His  
 245 250 255  
 Pro Glu Met Ile Gln Val Gly Gln Lys Ala Ala Asn Ala Leu Lys Ala  
 260 265 270  
 Lys Tyr Gly Thr Asn Tyr Arg Val Gly Ser Ser Ala Asp Ile Leu Tyr  
 275 280 285  
 Ala Ser Ser Gly Ser Ser Arg Asp Trp Ala Arg Asp Ile Gly Ile Pro  
 290 295 300  
 Phe Ser Tyr Thr Phe Glu Leu Arg Asp Ser Gly Thr Tyr Gly Phe Val  
 305 310 315 320  
 Leu Pro Glu Ala Gln Ile Gln Pro Thr Cys Glu Glu Thr Met Glu Ala  
 325 330 335  
 Val Leu Ser Val Leu Asp Asp Val Tyr Ala Lys His Trp His Ser Asp  
 340 345 350  
 Ser Ala Gly Arg Val Thr Ser Ala Thr Met Leu Leu Gly Leu Leu Val  
 355 360 365  
 Ser Cys Met Ser Leu Leu  
 370

<210> 62  
 <211> 529  
 <212> PRT  
 <213> Homo sapiens

<400> 62  
 Met Val Ser Asn Asp Ser His Thr Trp Val Thr Val Lys Asn Gly Ser  
 1 5 10 15  
 Gly Asp Met Ile Phe Glu Gly Asn Ser Glu Lys Glu Ile Pro Val Leu  
 20 25 30

Asn Glu Leu Pro Val Pro Met Val Ala Arg Tyr Ile Arg Ile Asn Pro  
 35 40 45

Gln Ser Trp Phe Asp Asn Gly Ser Ile Cys Met Arg Met Glu Ile Leu  
 50 55 60

Gly Cys Pro Leu Pro Asp Pro Asn Asn Tyr Tyr His Arg Arg Asn Glu  
 65 70 75 80

Met Thr Thr Thr Asp Asp Leu Asp Phe Lys His His Asn Tyr Lys Glu  
 85 90 95

Met Arg Gln Leu Met Lys Val Val Asn Glu Met Cys Pro Asn Ile Thr  
 100 105 110

Arg Ile Tyr Asn Ile Gly Lys Ser His Gln Gly Leu Lys Leu Tyr Ala  
 115 120 125

Val Glu Ile Ser Asp His Pro Gly Glu His Glu Val Gly Glu Pro Glu  
 130 135 140

Phe His Tyr Ile Ala Gly Ala His Gly Asn Glu Val Leu Gly Arg Glu  
 145 150 155 160

Leu Leu Leu Leu Val Gln Phe Val Cys Gln Glu Tyr Leu Ala Arg  
 165 170 175

Asn Ala Arg Ile Val His Leu Val Glu Glu Thr Arg Ile His Val Leu  
 180 185 190

Pro Ser Leu Asn Pro Asp Gly Tyr Glu Lys Ala Tyr Glu Gly Ser  
 195 200 205

Glu Leu Gly Gly Trp Ser Leu Gly Arg Trp Thr His Asp Gly Ile Asp  
 210 215 220

Ile Asn Asn Asn Phe Pro Asp Leu Asn Thr Leu Leu Trp Glu Ala Glu  
 225 230 235 240

Asp Arg Gln Asn Val Pro Arg Lys Val Pro Asn His Tyr Ile Ala Ile  
 245 250 255

Pro Glu Trp Phe Leu Ser Glu Asn Ala Thr Val Ala Ala Glu Thr Arg  
 260 265 270

Ala Val Ile Ala Trp Met Glu Lys Ile Pro Phe Val Leu Gly Gly Asn  
 275 280 285

Leu Gln Gly Gly Glu Leu Val Val Ala Tyr Pro Tyr Asp Leu Val Arg  
 290 295 300

Ser Pro Trp Lys Thr Gln Glu His Thr Pro Thr Pro Asp Asp His Val  
 305 310 315 320

Phe Arg Trp Leu Ala Tyr Ser Tyr Ala Ser Thr His Arg Leu Met Thr  
 325 330 335

Asp Ala Arg Arg Arg Val Cys His Thr Glu Asp Phe Gln Lys Glu Glu  
 340 345 350  
 Gly Thr Val Asn Gly Ala Ser Trp His Thr Val Ala Gly Ser Leu Asn  
 355 360 365  
 Asp Phe Ser Tyr Leu His Thr Asn Cys Phe Glu Leu Ser Ile Tyr Val  
 370 375 380  
 Gly Cys Asp Lys Tyr Pro His Glu Ser Gln Leu Pro Glu Glu Trp Glu  
 385 390 395 400  
 Asn Asn Arg Glu Ser Leu Ile Val Phe Met Glu Gln Val His Arg Gly  
 405 410 415  
 Ile Lys Gly Leu Val Arg Asp Ser His Gly Lys Gly Ile Pro Asn Ala  
 420 425 430  
 Ile Ile Ser Val Glu Gly Ile Asn His Asp Ile Arg Thr Ala Asn Asp  
 435 440 445  
 Gly Asp Tyr Trp Arg Leu Leu Asn Pro Gly Glu Tyr Val Val Thr Ala  
 450 455 460  
 Lys Ala Glu Gly Phe Thr Ala Ser Thr Lys Asn Cys Met Val Gly Tyr  
 465 470 475 480  
 Asp Met Gly Ala Thr Arg Cys Asp Phe Thr Leu Ser Lys Thr Asn Met  
 485 490 495  
 Ala Arg Ile Arg Glu Ile Met Glu Lys Phe Gly Lys Gln Pro Val Ser  
 500 505 510  
 Leu Pro Ala Arg Arg Leu Lys Leu Arg Gly Arg Lys Arg Arg Gln Arg  
 515 520 525  
 Gly

<210> 63  
 <211> 467  
 <212> PRT  
 <213> Homo sapiens

<400> 63  
 Met Trp Arg Cys Pro Leu Gly Leu Leu Leu Leu Pro Leu Ala Gly  
 1 5 10 15

His Leu Ala Leu Gly Ala Gln Gln Gly Arg Gly Arg Arg Glu Leu Ala  
 20 25 30

Pro Gly Leu His Leu Arg Gly Ile Arg Asp Ala Gly Gly Arg Tyr Cys  
 35 40 45

Gln Glu Gln Asp Leu Cys Cys Arg Gly Arg Ala Asp Asp Cys Ala Leu  
 50 55 60

Pro Tyr Leu Gly Ala Ile Cys Tyr Cys Asp Leu Phe Cys Asn Arg Thr  
 65 70 75 80

Val Ser Asp Cys Cys Pro Asp Phe Trp Asp Phe Cys Leu Gly Val Pro  
 85 90 95

Pro Pro Phe Pro Pro Ile Gln Gly Cys Met His Gly Gly Arg Ile Tyr  
 100 105 110

Pro Val Leu Gly Thr Tyr Trp Asp Asn Cys Asn Arg Cys Thr Cys Gln  
 115 120 125

Glu Asn Arg Gln Trp Gln Cys Asp Gln Glu Pro Cys Leu Val Asp Pro  
 130 135 140

Asp Met Ile Lys Ala Ile Asn Gln Gly Asn Tyr Gly Trp Gln Ala Gly  
 145 150 155 160

Asn His Ser Ala Phe Trp Gly Met Thr Leu Asp Glu Gly Ile Arg Tyr  
 165 170 175

Arg Leu Gly Thr Ile Arg Pro Ser Ser Val Met Asn Met His Glu  
 180 185 190

Ile Tyr Thr Val Leu Asn Pro Gly Glu Val Leu Pro Thr Ala Phe Glu  
 195 200 205

Ala Ser Glu Lys Trp Pro Asn Leu Ile His Glu Pro Leu Asp Gln Gly  
 210 215 220

Asn Cys Ala Gly Ser Trp Ala Phe Ser Thr Ala Ala Val Ala Ser Asp  
 225 230 235 240

Arg Val Ser Ile His Ser Leu Gly His Met Thr Pro Val Leu Ser Pro  
 245 250 255

Gln Asn Leu Leu Ser Cys Asp Thr His Gln Gln Gln Gly Cys Arg Gly  
 260 265 270

Gly Arg Leu Asp Gly Ala Trp Trp Phe Leu Arg Arg Gly Val Val  
 275 280 285

Ser Asp His Cys Tyr Pro Phe Ser Gly Arg Glu Arg Asp Glu Ala Gly  
 290 295 300

Pro Ala Pro Pro Cys Met Met His Ser Arg Ala Met Gly Arg Gly Lys  
 305 310 315 320

Arg Gln Ala Thr Ala His Cys Pro Asn Ser Tyr Val Asn Asn Asn Asp  
 325 330 335

Ile Tyr Gln Val Thr Pro Val Tyr Arg Leu Gly Ser Asn Asp Lys Glu  
 340 345 350

Ile Met Lys Glu Leu Met Glu Asn Gly Pro Val Gln Ala Leu Met Glu  
 355 360 365

Val His Glu Asp Phe Phe Leu Tyr Lys Gly Gly Ile Tyr Ser His Thr  
 370 375 380  
 Pro Val Ser Leu Gly Arg Pro Glu Arg Tyr Arg Arg His Gly Thr His  
 385 390 395 400  
 Ser Val Lys Ile Thr Gly Trp Gly Glu Glu Thr Leu Pro Asp Gly Arg  
 405 410 415  
 Thr Leu Lys Tyr Trp Thr Ala Ala Asn Ser Trp Gly Pro Ala Trp Gly  
 420 425 430  
 Glu Arg Gly His Phe Arg Ile Val Arg Gly Val Asn Glu Cys Asp Ile  
 435 440 445  
 Glu Ser Phe Val Leu Gly Val Trp Gly Arg Val Gly Met Glu Asp Met  
 450 455 460  
 Gly His His  
 465

<210> 64  
 <211> 3353  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> MOD\_RES  
 <222> (1891)  
 <223> Any amino acid

<400> 64  
 Met Cys Glu Asn Cys Ala Asp Leu Val Glu Val Leu Asn Glu Ile Ser  
 1 5 10 15

Asp Val Glu Gly Gly Asp Gly Leu Gln Leu Arg Lys Glu His Thr Leu  
 20 25 30

Lys Ile Phe Thr Tyr Ile Asn Ser Trp Thr Gln Arg Gln Cys Leu Cys  
 35 40 45

Cys Phe Lys Glu Tyr Lys His Leu Glu Ile Phe Asn Gln Val Val Cys  
 50 55 60

Ala Leu Ile Asn Leu Val Ile Ala Gln Val Gln Val Leu Arg Asp Gln  
 65 70 75 80

Leu Cys Lys His Cys Thr Thr Ile Asn Ile Asp Ser Thr Trp Gln Asp  
 85 90 95

Glu Ser Asn Gln Ala Glu Glu Pro Leu Asn Ile Asp Arg Glu Cys Asn  
 100 105 110

Glu Gly Ser Thr Glu Arg Gln Lys Ser Ile Glu Lys Lys Ser Asn Ser  
 115 120 125

Thr Arg Ile Cys Asn Leu Thr Glu Glu Glu Ser Ser Lys Ser Ser Asp  
 130 135 140

Pro Phe Ser Leu Trp Ser Thr Asp Glu Lys Glu Lys Leu Leu Leu Cys  
 145 150 155 160

Val Ala Lys Ile Phe Gln Ile Gln Phe Pro Leu Tyr Thr Ala Tyr Lys  
 165 170 175

His Asn Thr His Pro Thr Ile Glu Asp Ile Ser Thr Gln Glu Ser Asn  
 180 185 190

Ile Leu Gly Ala Phe Cys Asp Met Asn Asp Val Glu Val Pro Leu His  
 195 200 205

Leu Leu Arg Tyr Val Cys Leu Phe Cys Gly Lys Asn Gly Leu Ser Leu  
 210 215 220

Met Lys Asp Cys Phe Glu Tyr Gly Thr Pro Glu Thr Leu Pro Phe Leu  
 225 230 235 240

Ile Ala His Ala Phe Ile Thr Val Val Ser Asn Ile Arg Ile Trp Leu  
 245 250 255

His Ile Pro Ala Val Met Gln His Ile Ile Pro Phe Arg Thr Tyr Val  
 260 265 270

Ile Arg Tyr Leu Cys Lys Leu Ser Asp Gln Glu Leu Arg Gln Ser Ala  
 275 280 285

Ala Arg Asn Met Ala Asp Leu Met Trp Ser Thr Val Lys Glu Pro Leu  
 290 295 300

Asp Thr Thr Leu Cys Phe Asp Lys Glu Ser Leu Asp Leu Ala Phe Lys  
 305 310 315 320

Tyr Phe Met Ser Pro Thr Leu Thr Met Arg Leu Ala Gly Leu Ser Gln  
 325 330 335

Ile Thr Asn Gln Leu His Thr Phe Asn Asp Val Cys Asn Asn Glu Ser  
 340 345 350

Leu Val Ser Asp Thr Glu Thr Ser Ile Ala Lys Glu Leu Ala Asp Trp  
 355 360 365

Leu Ile Ser Asn Asn Val Val Glu His Ile Phe Gly Pro Asn Leu His  
 370 375 380

Ile Glu Ile Ile Lys Gln Cys Gln Val Ile Leu Asn Phe Leu Ala Ala  
 385 390 395 400

Glu Gly Arg Leu Ser Thr Gln His Ile Asp Cys Ile Trp Ala Ala Ala  
 405 410 415

Gln Leu Lys His Cys Ser Arg Tyr Ile His Asp Leu Phe Pro Ser Leu  
 420 425 430

Ile Lys Asn Leu Asp Pro Val Pro Leu Arg His Leu Leu Asn Leu Val  
 435 440 445  
 Ser Ala Leu Glu Pro Ser Val His Thr Glu Gln Thr Leu Tyr Leu Ala  
 450 455 460  
 Ser Met Leu Ile Lys Ala Leu Trp Asn Asn Ala Leu Ala Ala Lys Ala  
 465 470 475 480  
 Gln Leu Ser Lys Gln Ser Ser Phe Ala Ser Leu Leu Asn Thr Asn Ile  
 485 490 495  
 Pro Ile Gly Asn Lys Lys Glu Glu Glu Leu Arg Arg Thr Ala Pro  
 500 505 510  
 Ser Pro Trp Ser Pro Ala Ala Ser Pro Gln Ser Ser Asp Asn Ser Asp  
 515 520 525  
 Thr His Gln Ser Gly Gly Ser Asp Ile Glu Met Asp Glu Gln Leu Ile  
 530 535 540  
 Asn Arg Thr Lys His Val Gln Gln Arg Leu Ser Asp Thr Glu Glu Ser  
 545 550 555 560  
 Met Gln Gly Ser Ser Asp Glu Thr Ala Asn Ser Gly Glu Asp Gly Ser  
 565 570 575  
 Ser Gly Pro Gly Ser Ser Ser Gly His Ser Asp Gly Ser Ser Asn Glu  
 580 585 590  
 Val Asn Ser Ser His Ala Ser Gln Ser Ala Gly Ser Pro Gly Ser Glu  
 595 600 605  
 Val Gln Ser Glu Asp Ile Ala Asp Ile Glu Ala Leu Lys Glu Glu Asp  
 610 615 620  
 Glu Asp Asp Asp His Gly His Asn Pro Pro Lys Ser Ser Cys Gly Thr  
 625 630 635 640  
 Asp Leu Arg Asn Arg Lys Leu Glu Ser Gln Ala Gly Ile Cys Leu Gly  
 645 650 655  
 Asp Ser Gln Gly Thr Ser Glu Arg Asn Gly Thr Ser Ser Gly Thr Gly  
 660 665 670  
 Lys Asp Leu Val Phe Asn Thr Glu Ser Leu Pro Ser Val Asp Asn Arg  
 675 680 685  
 Met Arg Met Leu Asp Ala Cys Ser His Ser Glu Asp Pro Glu His Asp  
 690 695 700  
 Ile Ser Gly Glu Met Asn Ala Thr His Ile Ala Gln Gly Ser Gln Glu  
 705 710 715 720  
 Ser Cys Ile Thr Arg Thr Gly Asp Phe Leu Gly Glu Thr Ile Gly Asn  
 725 730 735

Glu Leu Phe Asn Cys Arg Gln Phe Ile Gly Pro Gln His His His His His  
 740 745 750  
 His His His His His His His Asp Gly His Met Val Asp Asp Met  
 755 760 765  
 Leu Ser Ala Asp Asp Val Ser Cys Ser Ser Gln Val Ser Ala Lys  
 770 775 780  
 Ser Glu Lys Asn Met Ala Asp Phe Asp Gly Glu Glu Ser Gly Cys Glu  
 785 790 795 800  
 Glu Glu Leu Val Gln Ile Asn Ser His Ala Glu Leu Thr Ser His Leu  
 805 810 815  
 Gln Gln His Leu Pro Asn Leu Ala Ser Ile Tyr His Glu His Leu Ser  
 820 825 830  
 Gln Gly Pro Val Val His Lys His Gln Phe Asn Ser Asn Ala Val Thr  
 835 840 845  
 Asp Ile Asn Leu Asp Asn Val Cys Lys Lys Gly Asn Thr Leu Leu Trp  
 850 855 860  
 Asp Ile Val Gln Asp Glu Asp Ala Val Asn Leu Ser Glu Gly Leu Ile  
 865 870 875 880  
 Asn Glu Ala Glu Lys Leu Leu Cys Ser Leu Val Cys Trp Phe Thr Asp  
 885 890 895  
 Arg Gln Ile Arg Met Arg Phe Ile Glu Gly Cys Leu Glu Asn Leu Gly  
 900 905 910  
 Asn Asn Arg Ser Val Val Ile Ser Leu Arg Leu Leu Pro Lys Leu Phe  
 915 920 925  
 Gly Thr Phe Gln Gln Phe Gly Ser Ser Tyr Asp Thr His Trp Ile Thr  
 930 935 940  
 Met Trp Ala Glu Lys Glu Leu Asn Met Met Lys Leu Phe Phe Asp Asn  
 945 950 955 960  
 Leu Val Tyr Tyr Ile Gln Thr Val Arg Glu Gly Arg Gln Lys His Ala  
 965 970 975  
 Leu Tyr Ser His Ser Ala Glu Val Gln Val Arg Leu Gln Phe Leu Thr  
 980 985 990  
 Cys Val Phe Ser Thr Leu Gly Ser Pro Asp His Phe Arg Leu Ser Leu  
 995 1000 1005  
 Glu Gln Val Asp Ile Leu Trp His Cys Leu Val Glu Asp Ser Glu Cys  
 1010 1015 1020  
 Tyr Asp Asp Ala Leu His Trp Phe Leu Asn Gln Val Arg Ser Lys Asp  
 1025 1030 1035 1040

Gln His Ala Met Gly Met Glu Thr Tyr Lys His Leu Phe Leu Glu Lys  
 1045 1050 1055

Met Pro Gln Leu Lys Pro Glu Thr Ile Ser Met Thr Gly Leu Asn Leu  
 1060 1065 1070

Phe Gln His Leu Cys Asn Leu Ala Arg Leu Ala Thr Ser Ala Tyr Asp  
 1075 1080 1085

Gly Cys Ser Asn Ser Glu Leu Cys Gly Met Asp Gln Phe Trp Gly Ile  
 1090 1095 1100

Ala Leu Arg Ala Gln Ser Gly Asp Val Ser Arg Ala Ala Ile Gln Tyr  
 1105 1110 1115 1120

Ile Asn Ser Tyr Tyr Ile Asn Gly Lys Thr Gly Leu Glu Lys Glu Gln  
 1125 1130 1135

Glu Phe Ile Ser Lys Cys Met Glu Ser Leu Met Ile Ala Ser Ser Ser  
 1140 1145 1150

Leu Glu Gln Glu Ser His Ser Ser Leu Met Val Ile Glu Arg Gly Leu  
 1155 1160 1165

Leu Met Leu Lys Thr His Leu Glu Ala Phe Arg Arg Arg Phe Ala Tyr  
 1170 1175 1180

His Leu Arg Gln Trp Gln Ile Glu Gly Thr Gly Ile Ser Ser His Leu  
 1185 1190 1195 1200

Lys Ala Leu Ser Asp Lys Gln Ser Leu Pro Leu Arg Val Val Cys Gln  
 1205 1210 1215

Pro Ala Gly Leu Pro Asp Lys Met Thr Ile Glu Met Tyr Pro Ser Asp  
 1220 1225 1230

Gln Val Ala Asp Leu Arg Ala Glu Val Thr His Trp Tyr Glu Asn Leu  
 1235 1240 1245

Gln Lys Glu Gln Ile Asn Gln Gln Ala Gln Leu Gln Glu Phe Gly Gln  
 1250 1255 1260

Ser Asn Arg Lys Gly Glu Phe Pro Gly Gly Leu Met Gly Pro Val Arg  
 1265 1270 1275 1280

Met Ile Ser Ser Gly His Glu Leu Thr Thr Asp Tyr Asp Glu Lys Ala  
 1285 1290 1295

Leu His Glu Leu Gly Phe Lys Asp Met Gln Met Val Phe Val Ser Leu  
 1300 1305 1310

Gly Ala Pro Arg Arg Glu Arg Lys Gly Glu Gly Val Gln Leu Pro Ala  
 1315 1320 1325

Ser Cys Leu Pro Pro Pro Gln Lys Asp Asn Ile Pro Met Leu Leu Leu  
 1330 1335 1340

Leu Gln Glu Pro His Leu Thr Thr Leu Phe Asp Leu Leu Glu Met Leu  
 1345 1350 1355 1360  
 Ala Ser Phe Lys Pro Pro Ser Gly Lys Val Ala Val Asp Asp Ser Glu  
 1365 1370 1375  
 Ser Leu Arg Cys Glu Glu Leu His Leu His Ala Glu Asn Leu Ser Arg  
 1380 1385 1390  
 Arg Val Trp Glu Leu Leu Met Leu Leu Pro Thr Cys Pro Asn Met Leu  
 1395 1400 1405  
 Met Ala Phe Gln Asn Ile Ser Asp Glu Gln Ser Phe Lys Ala Gln Ser  
 1410 1415 1420  
 Asp His Arg Ser Arg His Glu Val Ser His Tyr Ser Met Trp Leu Leu  
 1425 1430 1435 1440  
 Val Ser Trp Ala His Cys Cys Ser Leu Val Lys Ser Ser Leu Ala Asp  
 1445 1450 1455  
 Ser Asp His Leu Gln Asp Trp Leu Lys Lys Leu Thr Leu Ile Pro  
 1460 1465 1470  
 Glu Thr Ala Val Arg His Glu Ser Cys Ser Gly Leu Tyr Lys Leu Ser  
 1475 1480 1485  
 Leu Ser Gly Leu Asp Gly Gly Asp Ser Ile Asn Arg Ser Phe Leu Leu  
 1490 1495 1500  
 Leu Ala Ala Ser Thr Leu Leu Lys Phe Leu Pro Asp Ala Gln Ala Leu  
 1505 1510 1515 1520  
 Lys Pro Ile Arg Ile Asp Asp Tyr Glu Glu Glu Pro Ile Leu Lys Pro  
 1525 1530 1535  
 Gly Cys Lys Glu Tyr Phe Trp Leu Leu Cys Lys Leu Val Asp Asn Ile  
 1540 1545 1550  
 His Ile Lys Asp Ala Ser Gln Thr Thr Leu Leu Asp Leu Asp Ala Leu  
 1555 1560 1565  
 Ala Arg His Leu Ala Asp Cys Ile Arg Ser Arg Glu Ile Leu Asp His  
 1570 1575 1580  
 Gln Asp Gly Asn Val Glu Asp Asp Gly Leu Thr Gly Leu Leu Arg Leu  
 1585 1590 1595 1600  
 Ala Thr Ser Val Val Lys His Lys Pro Pro Phe Lys Phe Ser Arg Glu  
 1605 1610 1615  
 Gly Gln Glu Phe Leu Arg Asp Ile Phe Asn Leu Leu Phe Leu Leu Pro  
 1620 1625 1630  
 Ser Leu Lys Asp Arg Gln Gln Pro Lys Cys Lys Ser His Ser Ser Arg  
 1635 1640 1645

Ala Ala Ala Tyr Asp Leu Leu Val Glu Met Val Lys Gly Ser Val Glu  
 1650 1655 1660

Asn Tyr Arg Leu Ile His Asn Trp Val Met Ala Gln His Met Gln Ser  
 1665 1670 1675 1680

His Ala Pro Tyr Lys Trp Asp Tyr Trp Pro His Glu Asp Val Arg Ala  
 1685 1690 1695

Glu Cys Arg Phe Val Gly Leu Thr Asn Leu Gly Ala Thr Cys Tyr Leu  
 1700 1705 1710

Ala Ser Thr Ile Gln Gln Leu Tyr Met Ile Pro Glu Ala Arg Gln Ala  
 1715 1720 1725

Val Phe Thr Ala Lys Tyr Ser Glu Asp Met Lys His Lys Thr Thr Leu  
 1730 1735 1740

Leu Glu Leu Gln Lys Met Phe Thr Tyr Leu Met Glu Ser Glu Cys Lys  
 1745 1750 1755 1760

Ala Tyr Asn Pro Arg Pro Phe Cys Lys Thr Tyr Thr Met Asp Lys Gln  
 1765 1770 1775

Pro Leu Asn Thr Gly Glu Gln Lys Asp Met Thr Glu Phe Phe Thr Asp  
 1780 1785 1790

Leu Ile Thr Lys Ile Glu Glu Met Ser Pro Glu Leu Lys Asn Thr Val  
 1795 1800 1805

Lys Ser Leu Phe Gly Gly Val Ile Thr Asn Asn Val Val Ser Leu Asp  
 1810 1815 1820

Cys Glu His Val Ser Gln Thr Ala Glu Glu Phe Tyr Thr Val Arg Cys  
 1825 1830 1835 1840

Gln Val Ala Asp Met Lys Asn Ile Tyr Glu Ser Leu Asp Glu Val Thr  
 1845 1850 1855

Ile Lys Asp Thr Leu Glu Gly Asp Asn Met Tyr Thr Cys Ser Gln Cys  
 1860 1865 1870

Gly Lys Lys Val Arg Ala Glu Lys Arg Ala Cys Phe Lys Lys Leu Pro  
 1875 1880 1885

Arg Ile Xaa Ser Phe Asn Thr Met Arg Tyr Thr Phe Asn Met Val Thr  
 1890 1895 1900

Met Met Lys Glu Lys Val Asn Thr His Phe Ser Phe Pro Leu Arg Leu  
 1905 1910 1915 1920

Asp Met Thr Pro Tyr Thr Glu Asp Phe Leu Met Gly Lys Ser Glu Arg  
 1925 1930 1935

Lys Glu Gly Phe Lys Glu Val Ser Asp His Ser Lys Asp Ser Glu Ser  
 1940 1945 1950

Tyr Glu Tyr Asp Leu Ile Gly Val Thr Val His Thr Gly Thr Ala Asp  
 1955 1960 1965  
 Gly Gly His Tyr Tyr Ser Phe Ile Arg Asp Ile Val Asn Pro His Ala  
 1970 1975 1980  
 Tyr Lys Asn Asn Lys Trp Tyr Leu Phe Asn Asp Ala Glu Val Lys Pro  
 1985 1990 1995 2000  
 Phe Asp Ser Ala Gln Leu Ala Ser Glu Cys Phe Gly Gly Glu Met Thr  
 2005 2010 2015  
 Thr Lys Thr Tyr Asp Ser Val Thr Asp Lys Phe Met Asp Phe Ser Phe  
 2020 2025 2030  
 Glu Lys Thr His Ser Ala Tyr Met Leu Phe Tyr Lys Arg Met Glu Pro  
 2035 2040 2045  
 Glu Glu Glu Asn Gly Arg Glu Tyr Lys Phe Asp Val Ser Ser Glu Leu  
 2050 2055 2060  
 Leu Glu Trp Ile Trp His Asp Asn Met Gln Phe Leu Gln Asp Lys Asn  
 2065 2070 2075 2080  
 Ile Phe Glu His Thr Tyr Phe Gly Phe Met Trp Gln Leu Cys Ser Cys  
 2085 2090 2095  
 Ile Pro Ser Thr Leu Pro Asp Pro Lys Ala Val Ser Leu Met Thr Ala  
 2100 2105 2110  
 Lys Leu Ser Thr Ser Phe Val Leu Glu Thr Phe Ile His Ser Lys Glu  
 2115 2120 2125  
 Lys Pro Thr Met Leu Gln Trp Ile Glu Leu Leu Thr Lys Gln Phe Asn  
 2130 2135 2140  
 Asn Ser Gln Ala Ala Cys Glu Trp Phe Leu Asp Arg Met Ala Asp Asp  
 2145 2150 2155 2160  
 Asp Trp Trp Pro Met Gln Ile Leu Ile Lys Cys Pro Asn Gln Ile Val  
 2165 2170 2175  
 Arg Gln Met Phe Gln Arg Leu Cys Ile His Val Ile Gln Arg Leu Arg  
 2180 2185 2190  
 Pro Val His Ala His Leu Tyr Leu Gln Pro Gly Met Glu Asp Gly Ser  
 2195 2200 2205  
 Asp Asp Met Asp Thr Ser Val Glu Asp Ile Gly Gly Arg Ser Cys Val  
 2210 2215 2220  
 Thr Arg Phe Val Arg Thr Leu Leu Ile Met Glu His Gly Val Lys  
 2225 2230 2235 2240  
 Pro His Ser Lys His Leu Thr Glu Tyr Phe Ala Phe Leu Tyr Glu Phe  
 2245 2250 2255

Ala Lys Met Gly Glu Glu Glu Ser Gln Phe Leu Leu Ser Leu Gln Ala  
 2260 2265 2270

Ile Ser Thr Met Val His Phe Tyr Met Gly Thr Lys Gly Pro Glu Asn  
 2275 2280 2285

Pro Gln Val Glu Val Leu Ser Glu Glu Glu Gly Gly Glu Glu Glu  
 2290 2295 2300

Glu Glu Asp Ile Leu Ser Leu Ala Glu Glu Lys Tyr Arg Pro Ala Ala  
 2305 2310 2315 2320

Leu Glu Lys Met Ile Ala Leu Val Ala Leu Leu Val Glu Gln Ser Arg  
 2325 2330 2335

Ser Glu Arg His Leu Thr Leu Ser Gln Thr Asp Met Ala Ala Leu Thr  
 2340 2345 2350

Gly Gly Lys Gly Phe Pro Phe Leu Phe Gln His Ile Arg Asp Gly Ile  
 2355 2360 2365

Asn Ile Arg Gln Thr Cys Asn Leu Ile Phe Ser Leu Cys Arg Tyr Asn  
 2370 2375 2380

Asn Arg Leu Ala Glu His Ile Val Ser Met Leu Phe Thr Ser Ile Ala  
 2385 2390 2395 2400

Lys Leu Thr Pro Glu Ala Ala Asn Pro Phe Phe Lys Leu Leu Thr Met  
 2405 2410 2415

Leu Met Glu Phe Ala Gly Gly Pro Pro Gly Met Pro Pro Phe Ala Ser  
 2420 2425 2430

Tyr Ile Leu Gln Arg Ile Trp Glu Val Ile Glu Tyr Asn Pro Ser Gln  
 2435 2440 2445

Cys Leu Asp Trp Leu Ala Val Gln Thr Pro Arg Asn Lys Leu Ala His  
 2450 2455 2460

Ser Trp Val Leu Gln Asn Met Glu Asn Trp Val Glu Arg Phe Leu Leu  
 2465 2470 2475 2480

Ala His Asn Tyr Pro Arg Val Arg Thr Ser Ala Ala Tyr Leu Leu Val  
 2485 2490 2495

Ser Leu Ile Pro Ser Asn Ser Phe Arg Gln Met Phe Arg Ser Thr Arg  
 2500 2505 2510

Ser Leu His Ile Pro Thr Arg Asp Leu Pro Leu Ser Pro Asp Thr Thr  
 2515 2520 2525

Val Val Leu His Gln Val Tyr Asn Val Leu Leu Gly Leu Leu Ser Arg  
 2530 2535 2540

Ala Lys Leu Tyr Val Asp Ala Ala Val His Gly Thr Thr Lys Leu Val  
 2545 2550 2555 2560

Pro Tyr Phe Ser Phe Met Thr Tyr Cys Leu Ile Ser Lys Thr Glu Lys  
 2565 2570 2575

Leu Met Phe Ser Thr Tyr Phe Met Asp Leu Trp Asn Leu Phe Gln Pro  
 2580 2585 2590

Lys Leu Ser Glu Pro Ala Ile Ala Thr Asn His Asn Lys Gln Ala Leu  
 2595 2600 2605

Leu Ser Phe Trp Tyr Asn Val Cys Ala Asp Cys Pro Glu Asn Ile Arg  
 2610 2615 2620

Leu Ile Val Gln Asn Pro Val Val Thr Lys Asn Ile Ala Phe Asn Tyr  
 2625 2630 2635 2640

Ile Leu Ala Asp His Asp Asp Gln Asp Val Val Leu Phe Asn Arg Gly  
 2645 2650 2655

Met Leu Pro Ala Tyr Tyr Gly Ile Leu Arg Leu Cys Cys Glu Gln Ser  
 2660 2665 2670

Pro Ala Phe Thr Arg Gln Leu Ala Ser His Gln Asn Ile Gln Trp Ala  
 2675 2680 2685

Phe Lys Asn Leu Thr Pro His Ala Ser Gln Tyr Pro Gly Ala Val Glu  
 2690 2695 2700

Glu Leu Phe Asn Leu Met Gln Leu Phe Ile Ala Gln Arg Pro Asp Met  
 2705 2710 2715 2720

Arg Glu Glu Glu Leu Glu Asp Ile Lys Gln Phe Lys Lys Thr Thr Ile  
 2725 2730 2735

Ser Cys Tyr Leu Arg Cys Leu Asp Gly Arg Ser Cys Trp Thr Thr Leu  
 2740 2745 2750

Ile Ser Ala Phe Arg Ile Leu Leu Glu Ser Asp Glu Asp Arg Leu Leu  
 2755 2760 2765

Val Val Phe Asn Arg Gly Leu Ile Leu Met Thr Glu Ser Phe Asn Thr  
 2770 2775 2780

Leu His Met Met Tyr His Glu Ala Thr Ala Cys His Val Thr Gly Asp  
 2785 2790 2795 2800

Leu Val Glu Leu Leu Ser Ile Phe Leu Ser Val Leu Lys Ser Thr Arg  
 2805 2810 2815

Pro Tyr Leu Gln Arg Lys Asp Val Lys Gln Ala Leu Ile Gln Trp Gln  
 2820 2825 2830

Glu Arg Ile Glu Phe Ala His Lys Leu Leu Thr Leu Leu Asn Ser Tyr  
 2835 2840 2845

Ser Pro Pro Glu Leu Arg Asn Ala Cys Ile Asp Val Leu Lys Glu Leu  
 2850 2855 2860

Val Leu Leu Ser Pro His Asp Phe Leu His Thr Leu Val Pro Phe Leu  
 2865 2870 2875 2880  
 Gln His Asn His Cys Thr Tyr His His Ser Asn Ile Pro Met Ser Leu  
 2885 2890 2895  
 Gly Pro Tyr Phe Pro Cys Arg Glu Asn Ile Lys Leu Ile Gly Gly Lys  
 2900 2905 2910  
 Ser Asn Ile Arg Pro Pro Arg Pro Glu Leu Asn Met Cys Leu Leu Pro  
 2915 2920 2925  
 Thr Met Val Glu Thr Ser Lys Gly Lys Asp Asp Val Tyr Asp Arg Met  
 2930 2935 2940  
 Leu Leu Asp Tyr Phe Phe Ser Tyr His Gln Phe Ile His Leu Leu Cys  
 2945 2950 2955 2960  
 Arg Val Ala Ile Asn Cys Glu Lys Phe Thr Glu Thr Leu Val Lys Leu  
 2965 2970 2975  
 Ser Val Leu Val Ala Tyr Glu Gly Leu Pro Leu His Leu Ala Leu Phe  
 2980 2985 2990  
 Pro Lys Leu Trp Thr Glu Leu Cys Gln Thr Gln Ser Ala Met Ser Lys  
 2995 3000 3005  
 Asn Cys Ile Lys Leu Leu Cys Glu Asp Pro Val Phe Ala Glu Tyr Ile  
 3010 3015 3020  
 Lys Cys Ile Leu Met Asp Glu Arg Thr Phe Leu Asn Asn Asn Ile Val  
 3025 3030 3035 3040  
 Tyr Thr Phe Met Thr His Phe Leu Leu Lys Val Gln Ser Gln Val Phe  
 3045 3050 3055  
 Ser Glu Ala Asn Cys Ala Asn Leu Ile Ser Thr Leu Ile Thr Asn Leu  
 3060 3065 3070  
 Ile Ser Gln Tyr Gln Asn Leu Gln Ser Asp Phe Ser Asn Arg Val Glu  
 3075 3080 3085  
 Ile Ser Lys Ala Ser Ala Ser Leu Asn Gly Asp Leu Arg Ala Leu Ala  
 3090 3095 3100  
 Leu Leu Leu Ser Val His Thr Pro Lys Gln Leu Asn Pro Ala Leu Ile  
 3105 3110 3115 3120  
 Pro Thr Leu Gln Glu Leu Leu Ser Lys Cys Arg Thr Cys Leu Gln Gln  
 3125 3130 3135  
 Arg Asn Ser Leu Gln Glu Gln Glu Ala Lys Glu Arg Lys Thr Lys Asp  
 3140 3145 3150  
 Asp Glu Gly Ala Thr Pro Ile Lys Arg Arg Arg Val Ser Ser Asp Glu  
 3155 3160 3165

Glu His Thr Val Asp Ser Cys Ile Ser Asp Met Lys Thr Glu Thr Arg  
 3170 3175 3180

Glu Val Leu Thr Pro Thr Ser Thr Ser Asp Asn Glu Thr Arg Asp Ser  
 3185 3190 3195 3200

Ser Ile Ile Asp Pro Gly Thr Glu Gln Asp Leu Pro Ser Pro Glu Asn  
 3205 3210 3215

Ser Ser Val Lys Glu Tyr Arg Met Glu Val Pro Ser Ser Phe Ser Glu  
 3220 3225 3230

Asp Met Ser Asn Ile Arg Ser Gln His Ala Glu Glu Gln Ser Asn Asn  
 3235 3240 3245

Gly Arg Tyr Asp Asp Cys Lys Glu Phe Lys Asp Leu His Cys Ser Lys  
 3250 3255 3260

Asp Ser Thr Leu Ala Glu Glu Ser Glu Phe Pro Ser Thr Ser Ile  
 3265 3270 3275 3280

Ser Ala Val Leu Ser Asp Leu Ala Asp Leu Arg Ser Cys Asp Gly Gln  
 3285 3290 3295

Ala Leu Pro Ser Gln Asp Pro Glu Val Ala Leu Ser Leu Ser Cys Gly  
 3300 3305 3310

His Ser Arg Gly Leu Phe Ser His Met Gln Gln His Asp Ile Leu Asp  
 3315 3320 3325

Thr Leu Cys Arg Thr Ile Glu Ser Thr Ile His Val Val Thr Arg Ile  
 3330 3335 3340

Ser Gly Lys Gly Asn Gln Ala Ala Ser  
 3345 3350

<210> 65  
 <211> 980  
 <212> PRT  
 <213> Homo sapiens

<400> 65  
 Met Ser Pro Leu Lys Ile His Gly Pro Ile Arg Ile Arg Ser Met Gln  
 1 5 10 15

Thr Gly Ile Thr Lys Trp Lys Glu Gly Ser Phe Glu Ile Val Glu Lys  
 20 25 30

Glu Asn Lys Val Ser Leu Val Val His Tyr Asn Thr Gly Gly Ile Pro  
 35 40 45

Arg Ile Phe Gln Leu Ser His Asn Ile Lys Asn Val Val Leu Arg Pro  
 50 55 60

Ser Gly Ala Lys Gln Ser Arg Leu Met Leu Thr Leu Gln Asp Asn Ser  
 65 70 75 80

Phe Leu Ser Ile Asp Lys Val Pro Ser Lys Asp Ala Glu Glu Met Arg  
 85 90 95

Leu Phe Leu Asp Ala Val His Gln Asn Arg Leu Pro Ala Ala Met Lys  
 100 105 110

Pro Ser Gln Gly Ser Gly Ser Phe Gly Ala Ile Leu Gly Ser Arg Thr  
 115 120 125

Ser Gln Lys Glu Thr Ser Arg Gln Leu Ser Tyr Ser Asp Asn Gln Ala  
 130 135 140

Ser Ala Lys Arg Gly Ser Leu Glu Thr Lys Asp Asp Ile Pro Phe Arg  
 145 150 155 160

Lys Val Leu Gly Asn Pro Gly Arg Gly Ser Ile Lys Thr Val Ala Gly  
 165 170 175

Ser Gly Ile Ala Arg Thr Ile Pro Ser Leu Thr Ser Thr Ser Thr Pro  
 180 185 190

Leu Arg Ser Gly Leu Leu Glu Asn Arg Thr Glu Lys Arg Lys Arg Met  
 195 200 205

Ile Ser Thr Gly Ser Glu Leu Asn Glu Asp Tyr Pro Lys Glu Asn Asp  
 210 215 220

Ser Ser Ser Asn Asn Lys Ala Met Thr Asp Pro Ser Arg Lys Tyr Leu  
 225 230 235 240

Thr Ser Ser Arg Glu Lys Gln Leu Ser Leu Lys Gln Ser Glu Glu Asn  
 245 250 255

Arg Thr Ser Gly Gly Leu Leu Pro Leu Gln Ser Ser Phe Tyr Gly  
 260 265 270

Ser Arg Ala Gly Ser Lys Glu His Ser Ser Gly Gly Thr Asn Leu Asp  
 275 280 285

Arg Thr Asn Val Ser Ser Gln Thr Pro Ser Ala Lys Arg Ser Leu Gly  
 290 295 300

Phe Leu Pro Gln Pro Val Pro Leu Ser Val Lys Lys Leu Arg Cys Asn  
 305 310 315 320

Gln Asp Tyr Thr Gly Trp Asn Lys Pro Arg Val Pro Leu Ser Ser His  
 325 330 335

Gln Gln Gln Leu Gln Gly Phe Ser Asn Leu Gly Asn Thr Cys Tyr  
 340 345 350

Met Asn Ala Ile Leu Gln Ser Leu Phe Ser Leu Gln Ser Phe Ala Asn  
 355 360 365

Asp Leu Leu Lys Gln Gly Ile Pro Trp Lys Lys Ile Pro Leu Asn Ala  
 370 375 380

Leu Ile Arg Arg Phe Ala His Leu Leu Val Lys Lys Asp Ile Cys Asn  
 385 390 395 400

Ser Glu Thr Lys Lys Asp Leu Leu Lys Lys Val Lys Asn Ala Ile Ser  
 405 410 415

Ala Thr Ala Glu Arg Phe Ser Gly Tyr Met Gln Asn Asp Ala His Glu  
 420 425 430

Phe Leu Ser Gln Cys Leu Asp Gln Leu Lys Glu Asp Met Glu Lys Leu  
 435 440 445

Asn Lys Thr Trp Lys Thr Glu Pro Val Ser Gly Glu Glu Asn Ser Pro  
 450 455 460

Asp Ile Ser Ala Thr Arg Ala Tyr Thr Cys Pro Val Ile Thr Asn Leu  
 465 470 475 480

Glu Phe Glu Val Gln His Ser Ile Ile Cys Lys Ala Cys Gly Glu Ile  
 485 490 495

Ile Pro Lys Arg Glu Gln Phe Asn Asp Leu Ser Ile Asp Leu Pro Arg  
 500 505 510

Arg Lys Lys Pro Leu Pro Pro Arg Ser Ile Gln Asp Ser Leu Asp Leu  
 515 520 525

Phe Phe Arg Ala Glu Glu Leu Glu Tyr Ser Cys Glu Lys Cys Gly Gly  
 530 535 540

Lys Cys Ala Leu Val Arg His Lys Phe Asn Arg Leu Pro Arg Val Leu  
 545 550 555 560

Ile Leu His Leu Lys Arg Tyr Ser Phe Asn Val Ala Leu Ser Leu Asn  
 565 570 575

Asn Lys Ile Gly Gln Gln Val Ile Ile Pro Arg Tyr Leu Thr Leu Ser  
 580 585 590

Ser His Cys Thr Glu Asn Thr Lys Pro Pro Phe Thr Leu Gly Trp Ser  
 595 600 605

Ala His Met Ala Met Ser Arg Pro Leu Lys Ala Ser Gln Met Val Asn  
 610 615 620

Ser Cys Ile Thr Ser Pro Ser Thr Pro Ser Lys Lys Phe Thr Phe Lys  
 625 630 635 640

Ser Lys Ser Ser Leu Ala Leu Cys Leu Asp Ser Asp Ser Glu Asp Glu  
 645 650 655

Leu Lys Arg Ser Val Ala Leu Ser Gln Arg Leu Cys Glu Met Leu Gly  
 660 665 670

Asn Glu Gln Gln Gln Glu Asp Leu Glu Lys Asp Ser Lys Leu Cys Pro  
 675 680 685

Ile Glu Pro Asp Lys Ser Glu Leu Glu Asn Ser Gly Phe Asp Arg Met  
 690 695 700  
 Ser Glu Glu Glu Leu Leu Ala Ala Val Leu Glu Ile Ser Lys Arg Asp  
 705 710 715 720  
 Ala Ser Pro Ser Leu Ser His Glu Asp Asp Asp Lys Pro Thr Ser Ser  
 725 730 735  
 Pro Asp Thr Gly Phe Ala Glu Asp Asp Ile Gln Glu Met Pro Glu Asn  
 740 745 750  
 Pro Asp Thr Met Glu Thr Glu Lys Pro Lys Thr Ile Thr Glu Leu Asp  
 755 760 765  
 Pro Ala Ser Phe Thr Glu Ile Thr Lys Asp Cys Asp Glu Asn Lys Glu  
 770 775 780  
 Asn Lys Thr Pro Glu Gly Ser Gln Gly Glu Val Asp Trp Leu Gln Gln  
 785 790 795 800  
 Tyr Asp Met Glu Arg Glu Arg Glu Glu Gln Glu Leu Gln Gln Ala Leu  
 805 810 815  
 Ala Gln Ser Leu Gln Glu Gln Glu Ala Trp Glu Gln Lys Glu Asp Asp  
 820 825 830  
 Asp Leu Lys Arg Ala Thr Glu Leu Ser Leu Gln Glu Phe Asn Asn Ser  
 835 840 845  
 Phe Val Asp Ala Leu Gly Ser Asp Glu Asp Ser Gly Asn Glu Asp Val  
 850 855 860  
 Phe Asp Met Glu Tyr Thr Glu Ala Glu Ala Glu Glu Leu Lys Arg Asn  
 865 870 875 880  
 Ala Glu Thr Gly Asn Leu Pro His Ser Tyr Arg Leu Ile Ser Val Val  
 885 890 895  
 Ser His Ile Gly Ser Thr Ser Ser Gly His Tyr Ile Ser Asp Val  
 900 905 910  
 Tyr Asp Ile Lys Lys Gln Ala Trp Phe Thr Tyr Asn Asp Leu Glu Val  
 915 920 925  
 Ser Lys Ile Gln Glu Ala Ala Val Gln Ser Asp Arg Asp Arg Ser Gly  
 930 935 940  
 Tyr Ile Phe Phe Tyr Met His Lys Glu Ile Phe Asp Glu Leu Leu Glu  
 945 950 955 960  
 Thr Glu Lys Asn Ser Gln Ser Leu Ser Thr Glu Val Gly Lys Thr Thr  
 965 970 975  
 Arg Gln Ala Ser  
 980

<210> 66  
 <211> 953  
 <212> PRT  
 <213> Homo sapiens

<400> 66  
 Met Thr Leu Leu Ala Pro Trp Tyr Thr Gly Pro Met Ile Pro Met Asp  
 1 5 10 15  
 Val Asn Glu Pro Ser Ser Val Thr Thr Ala Pro Thr Leu Ser Ser Ser  
 20 25 30  
 Leu Gln His Ile Ser Ser Phe Leu Ala Thr Gly Lys Lys Leu Ser Leu  
 35 40 45  
 His Phe Gly His Pro Arg Glu Cys Glu Val Thr Arg Ile Asp Asp Lys  
 50 55 60  
 Asn Arg Arg Gly Leu Glu Asp Ser Glu Pro Gly Ala Lys Leu Phe Asn  
 65 70 75 80  
 Asn Asp Gly Val Cys Cys Cys Leu Gln Lys Arg Gly Pro Val Asn Ile  
 85 90 95  
 Thr Ser Val Cys Val Ser Pro Arg Thr Leu Gln Ile Ser Val Phe Val  
 100 105 110  
 Leu Ser Glu Lys Tyr Glu Gly Ile Val Lys Phe Glu Ser Asp Glu Leu  
 115 120 125  
 Pro Phe Gly Val Ile Gly Ser Asn Ile Gly Asp Ala His Phe Gln Glu  
 130 135 140  
 Phe Arg Ala Gly Ile Ser Trp Lys Pro Val Val Asp Pro Asp Asp Pro  
 145 150 155 160  
 Ile Pro Gln Phe Pro Asp Cys Cys Ser Ser Ser Ser Arg Ile Pro  
 165 170 175  
 Ser Val Ser Val Leu Val Ala Val Pro Leu Val Ala Gly His Lys Gly  
 180 185 190  
 Gln Ala Phe Ile Glu Arg Met Leu Gly Cys Phe Lys Glu Leu Lys Gln  
 195 200 205  
 Glu Leu Thr Gln Glu Gly Pro Gly Gly His Pro Arg Ser Ala Trp  
 210 215 220  
 Pro Pro Arg Arg His Ala Gln Trp Pro Pro Glu Pro Cys Glu Gln Gly  
 225 230 235 240  
 Glu Glu Pro Pro Pro Val Glu Ala Glu Glu Val Glu Glu Ala Glu Thr  
 245 250 255  
 Ala Glu Lys Ala Glu Arg Lys Val Glu Ala Glu Ala Lys Val Glu Gly  
 260 265 270

Lys Ala Glu Ala Ala Gly Lys Ala Glu Ala Ala Gly Lys Val Asp Ala  
 275 280 285

Thr Glu Lys Val Glu Thr Ala Gly Lys Val Asp Ala Ala Gly Lys Val  
 290 295 300

Glu Thr Ala Glu Gly Pro Gly Arg Arg Ala Glu Leu Lys Leu Glu Pro  
 305 310 315 320

Glu Pro Glu Pro Val Arg Glu Ala Glu Gln Glu Pro Lys Gln Glu Leu  
 325 330 335

Glu Asp Glu Asn Pro Ala Arg Ser Gly Gly Gly Asn Ser Asp Glu  
 340 345 350

Val Pro Pro Pro Thr Leu Pro Ser Asp Pro Pro Arg Pro Pro Asp Pro  
 355 360 365

Ser Pro Arg Arg Ser Arg Ala Pro Arg Arg Arg Pro Arg Pro Arg Pro  
 370 375 380

Gln Thr Arg Leu Arg Thr Pro Pro Gln Pro Arg Pro Arg Pro Pro Pro  
 385 390 395 400

Arg Pro Arg Pro Arg Arg Gly Pro Gly Gly Cys Leu Asp Val Asp  
 405 410 415

Phe Ala Val Gly Pro Pro Gly Cys Ser His Val Asn Ser Phe Lys Val  
 420 425 430

Gly Glu Asn Trp Arg Gln Glu Leu Arg Val Ile Tyr Gln Cys Phe Val  
 435 440 445

Trp Cys Gly Thr Pro Glu Thr Arg Lys Ser Lys Ala Lys Ser Cys Ile  
 450 455 460

Cys His Val Cys Gly Thr His Leu Asn Arg Leu His Ser Cys Leu Ser  
 465 470 475 480

Cys Val Phe Phe Gly Cys Phe Thr Glu Lys His Ile His Glu His Ala  
 485 490 495

Glu Thr Lys Gln His Asn Leu Ala Val Asp Leu Tyr Tyr Gly Gly Ile  
 500 505 510

Tyr Cys Phe Met Cys Lys Asp Tyr Val Tyr Asp Lys Asp Ile Glu Gln  
 515 520 525

Ile Ala Lys Glu Glu Gln Gly Glu Ala Leu Lys Leu Gln Ala Ser Thr  
 530 535 540

Ser Thr Glu Val Ser His Gln Gln Cys Ser Val Pro Gly Leu Gly Glu  
 545 550 555 560

Lys Phe Pro Thr Trp Glu Thr Thr Lys Pro Glu Leu Glu Leu Leu Gly  
 565 570 575

His Asn Pro Arg Arg Arg Arg Ile Thr Ser Ser Phe Thr Ile Gly Leu  
 580 585 590

Arg Gly Leu Ile Asn Leu Gly Asn Thr Cys Phe Met Asn Cys Ile Val  
 595 600 605

Gln Ala Leu Thr His Thr Pro Ile Leu Arg Asp Phe Phe Leu Ser Asp  
 610 615 620

Arg His Arg Cys Glu Met Pro Ser Pro Glu Leu Cys Leu Val Cys Glu  
 625 630 635 640

Met Ser Ser Leu Phe Arg Glu Leu Tyr Ser Gly Asn Pro Ser Pro His  
 645 650 655

Val Pro Tyr Lys Leu Leu His Leu Val Trp Ile His Ala Arg His Leu  
 660 665 670

Ala Gly Tyr Arg Gln Gln Asp Ala His Glu Phe Leu Ile Ala Ala Leu  
 675 680 685

Asp Val Leu His Arg His Cys Lys Gly Asp Asp Val Gly Lys Ala Ala  
 690 695 700

Asn Asn Pro Asn His Cys Asn Cys Ile Ile Asp Gln Ile Phe Thr Gly  
 705 710 715 720

Gly Leu Gln Ser Asp Val Thr Cys Gln Ala Cys His Gly Val Ser Thr  
 725 730 735

Thr Ile Asp Pro Cys Trp Asp Ile Ser Leu Asp Leu Pro Gly Ser Cys  
 740 745 750

Thr Ser Phe Trp Pro Met Ser Pro Gly Arg Glu Ser Ser Val Asn Gly  
 755 760 765

Glu Ser His Ile Pro Gly Ile Thr Thr Leu Thr Asp Cys Leu Arg Arg  
 770 775 780

Phe Thr Arg Pro Glu His Leu Gly Ser Ser Ala Lys Ile Lys Cys Gly  
 785 790 795 800

Ser Cys Gln Ser Tyr Gln Glu Ser Thr Lys Gln Leu Thr Met Asn Lys  
 805 810 815

Leu Pro Val Val Ala Cys Phe His Phe Lys Arg Phe Glu His Ser Ala  
 820 825 830

Lys Gln Arg Arg Lys Ile Thr Thr Tyr Ile Ser Phe Pro Leu Glu Leu  
 835 840 845

Asp Met Thr Pro Phe Met Ala Ser Ser Lys Glu Ser Arg Met Asn Gly  
 850 855 860

Gln Leu Gln Leu Pro Thr Asn Ser Gly Asn Asn Glu Asn Lys Tyr Ser  
 865 870 875 880

Leu Phe Ala Val Val Asn His Gln Gly Thr Leu Glu Ser Gly His Tyr  
 885 890 895

Thr Ser Phe Ile Arg His His Lys Asp Gln Trp Phe Lys Cys Asp Asp  
 900 905 910

Ala Val Ile Thr Lys Ala Ser Ile Lys Asp Val Leu Asp Ser Glu Gly  
 915 920 925

Tyr Leu Leu Phe Tyr His Lys Gln Val Leu Glu His Glu Ser Glu Lys  
 930 935 940

Val Lys Glu Met Asn Thr Gln Ala Tyr  
 945 950

<210> 67

<211> 783

<212> PRT

<213> Homo sapiens

<400> 67

Met Arg Val Lys Asp Pro Thr Lys Ala Leu Pro Glu Lys Ala Lys Arg  
 1 5 10 15

Ser Lys Arg Pro Thr Val Pro His Asp Glu Asp Ser Ser Asp Asp Ile  
 20 25 30

Ala Val Gly Leu Thr Cys Gln His Val Ser His Ala Ile Ser Val Asn  
 35 40 45

His Val Lys Arg Ala Ile Ala Glu Asn Leu Trp Ser Val Cys Ser Glu  
 50 55 60

Cys Leu Glu Glu Arg Arg Phe Tyr Asp Gly Gln Leu Val Leu Thr Ser  
 65 70 75 80

Asp Ile Trp Leu Cys Leu Lys Cys Gly Phe Gln Gly Cys Gly Lys Asn  
 85 90 95

Ser Glu Ser Gln His Ser Leu Lys His Phe Lys Ser Ser Arg Thr Glu  
 100 105 110

Pro His Cys Ile Ile Ile Asn Leu Ser Thr Trp Ile Ile Trp Cys Tyr  
 115 120 125

Glu Cys Asp Glu Lys Leu Ser Thr His Cys Asn Lys Lys Val Leu Ala  
 130 135 140

Gln Ile Val Asp Phe Leu Gln Lys His Ala Ser Lys Thr Gln Thr Ser  
 145 150 155 160

Ala Phe Ser Arg Ile Met Lys Leu Cys Glu Glu Lys Cys Glu Thr Asp  
 165 170 175

Glu Ile Gln Lys Gly Gly Lys Cys Arg Asn Leu Ser Val Arg Gly Ile  
 180 185 190

Thr Asn Leu Gly Asn Thr Cys Phe Phe Asn Ala Val Met Gln Asn Leu  
 195 200 205

Ala Gln Thr Tyr Thr Leu Thr Asp Leu Met Asn Glu Ile Lys Glu Ser  
 210 215 220

Ser Thr Lys Leu Lys Ile Phe Pro Ser Ser Asp Ser Gln Leu Asp Pro  
 225 230 235 240

Leu Val Val Glu Leu Ser Arg Pro Gly Pro Leu Thr Ser Ala Leu Phe  
 245 250 255

Leu Phe Leu His Ser Met Lys Glu Thr Glu Lys Gly Pro Leu Ser Pro  
 260 265 270

Lys Val Leu Phe Asn Gln Leu Cys Gln Lys Ala Pro Arg Phe Lys Asp  
 275 280 285

Phe Gln Gln Gln Asp Ser Gln Glu Leu Leu His Tyr Leu Leu Asp Ala  
 290 295 300

Val Arg Thr Glu Glu Thr Lys Arg Ile Gln Ala Ser Ile Leu Lys Ala  
 305 310 315 320

Phe Asn Asn Pro Thr Thr Lys Thr Ala Asp Asp Glu Thr Arg Lys Lys  
 325 330 335

Val Lys Ile Ser Thr Val Lys Asp Pro Phe Ile Asp Ile Ser Leu Pro  
 340 345 350

Ile Ile Glu Glu Arg Val Ser Lys Pro Leu Leu Trp Gly Arg Met Asn  
 355 360 365

Lys Tyr Arg Ser Leu Arg Glu Thr Asp His Asp Arg Tyr Ser Gly Asn  
 370 375 380

Val Thr Ile Glu Asn Ile His Gln Pro Arg Ala Ala Lys Lys His Ser  
 385 390 395 400

Ser Ser Lys Asp Lys Ser Gln Leu Ile His Asp Arg Lys Cys Ile Arg  
 405 410 415

Lys Leu Ser Ser Gly Glu Thr Val Thr Tyr Gln Lys Asn Glu Asn Leu  
 420 425 430

Glu Met Asn Gly Asp Ser Leu Met Phe Ala Ser Leu Met Asn Ser Glu  
 435 440 445

Ser Arg Leu Asn Glu Ser Pro Thr Asp Asp Ser Glu Lys Glu Ala Ser  
 450 455 460

His Ser Glu Ser Asn Val Asp Ala Asp Ser Glu Pro Ser Glu Ser Glu  
 465 470 475 480

Ser Ala Ser Lys Gln Thr Gly Leu Phe Arg Ser Ser Ser Gly Ser Gly  
 485 490 495

Val Gln Pro Asp Gly Pro Leu Tyr Pro Leu Ser Ala Gly Lys Leu Leu  
 500 505 510

Tyr Thr Lys Glu Thr Asp Ser Gly Asp Lys Glu Met Ala Glu Ala Ile  
 515 520 525

Ser Glu Leu Arg Leu Ser Ser Thr Val Thr Gly Asp Gln Asp Phe Asp  
 530 535 540

Arg Glu Asn Gln Pro Leu Asn Ile Ser Asn Asn Leu Cys Phe Leu Glu  
 545 550 555 560

Gly Lys His Leu Arg Ser Tyr Ser Pro Gln Asn Ala Phe Gln Thr Leu  
 565 570 575

Ser Gln Ser Tyr Ile Thr Thr Ser Lys Glu Cys Ser Ile Gln Ser Cys  
 580 585 590

Leu Tyr Gln Phe Thr Ser Met Glu Leu Leu Met Gly Asn Asn Lys Leu  
 595 600 605

Leu Cys Glu Asn Cys Thr Lys Asn Lys Gln Lys Tyr Gln Glu Glu Thr  
 610 615 620

Ser Phe Ala Glu Lys Lys Val Glu Gly Val Tyr Thr Asn Ala Arg Lys  
 625 630 635 640

Gln Leu Leu Ile Ser Ala Val Pro Ala Val Leu Ile Leu His Leu Lys  
 645 650 655

Arg Phe His Gln Ala Gly Leu Ser Leu Arg Lys Val Asn Arg His Val  
 660 665 670

Asp Phe Pro Leu Met Leu Asp Leu Ala Pro Phe Cys Ser Ala Thr Cys  
 675 680 685

Lys Asn Ala Ser Val Gly Asp Lys Val Leu Tyr Gly Leu Tyr Gly Ile  
 690 695 700

Val Glu His Ser Gly Ser Met Arg Glu Gly His Tyr Thr Ala Tyr Val  
 705 710 715 720

Lys Val Arg Thr Pro Ser Arg Lys Leu Ser Glu His Asn Thr Lys Lys  
 725 730 735

Lys Asn Val Pro Gly Leu Lys Ala Ala Asp Ser Glu Ser Ala Gly Gln  
 740 745 750

Trp Val His Val Ser Asp Thr Tyr Leu Gln Val Val Pro Glu Ser Arg  
 755 760 765

Ala Leu Ser Ala Gln Ala Tyr Leu Leu Phe Tyr Glu Arg Val Leu  
 770 775 780

<210> 68  
 <211> 753  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 68

Met	Glu	Tyr	Pro	Val	Pro	Tyr	Phe	Arg	Ser	Pro	Asn	Arg	Thr	Leu	Ile
1				5					10					15	
Pro	Glu	Arg	Ile	Trp	Ser	Asn	Pro	Leu	Leu	Val	Leu	Val	Ile	Ala	Tyr
								20	25				30		
Lys	Thr	Val	Ser	Trp	Pro	Arg	Gln	Gln	Leu	Leu	Ala	Lys	Gln	Ala	Asn
							35	40				45			
Lys	Trp	Met	Pro	Phe	Val	Ile	Pro	Ser	Lys	Thr	Leu	Pro	Trp	Asp	Pro
							50	55			60				
Leu	Glu	Leu	Lys	Ile	Cys	Tyr	Gln	Gln	Asn	Arg	Pro	Tyr	Pro	Ser	Pro
							65	70			75			80	
Asp	Pro	Ser	Asn	Phe	Pro	Thr	Phe	Leu	Arg	Cys	Leu	Asn	Ala	Phe	Ser
							85		90				95		
Ala	Ala	Val	Phe	Tyr	Leu	Pro	Gln	Pro	Ser	Trp	His	Lys	Pro	Glu	Gly
							100		105			110			
Leu	Lys	Pro	Ala	Gly	Tyr	Pro	Arg	Val	Pro	Asp	Ile	Pro	Tyr	Gly	Ser
							115		120			125			
Gly	Tyr	Thr	Leu	Lys	Ser	Thr	Thr	Glu	Ala	Ala	Gly	Leu	His	Gln	Ser
							130		135			140			
Leu	Pro	Met	Val	Gln	Leu	Pro	Leu	His	Pro	Thr	Lys	Gly	Ser	Ala	Leu
							145		150		155			160	
Leu	Lys	Glu	Ser	Glu	Leu	Asn	Asp	Ala	Asp	Trp	Ala	Asn	Leu	Met	Trp
							165		170			175			
Lys	Arg	Tyr	Leu	Glu	Glu	Gln	Glu	Asp	Ser	Lys	Met	Val	Asp	Leu	Phe
							180		185			190			
Val	Gly	Gln	Met	Lys	Ser	Tyr	Leu	Lys	Cys	Gln	Ala	Cys	Gly	Tyr	His
							195		200			205			
Ser	Met	Thr	Phe	Lys	Val	Phe	Phe	Cys	Asp	Leu	Ser	Leu	Thr	Ile	
							210		215			220			
Pro	Lys	Lys	Gly	Phe	Ala	Gly	Gly	Lys	Val	Ser	Leu	Arg	Asp	Cys	Leu
							225		230		235			240	
Ser	Leu	Phe	Thr	Lys	Glu	Glu	Glu	Leu	Glu	Leu	Glu	Asn	Ala	Ser	Gly
							245		250			255			
Thr	Leu	Pro	Val	Thr	Lys	Ser	Glu	Val	Leu	Ser	Thr	Ser	Cys	Val	Pro
							260		265			270			
Phe	Gly	Thr	Thr	Gln	Ala	Ala	Ser	Thr	Val	Ala	Thr	Thr	Gln	Pro	Cys
							275		280			285			

Ala Ser Ala Arg Leu Val Gly Thr Phe Thr Met Thr Leu Val Ser Pro  
 290 295 300  
 Leu Asn Thr Leu Arg Asp Thr Glu Gly Ile Glu Leu Thr Val Met Lys  
 305 310 315 320  
 Ala Leu Val Leu Asp Ile Leu Phe Lys Ala Ser Thr Asp Ile Ile Leu  
 325 330 335  
 Phe Asn His Asp Ser Ser Gly Asn Lys Trp Arg Lys Leu Pro Glu  
 340 345 350  
 Pro Gly Gly Leu Glu Lys Lys His Glu Glu Leu Arg Leu Arg Pro Leu  
 355 360 365  
 Lys Glu Glu Tyr His Trp Leu Val Leu Val Pro Leu Lys Leu Thr Gly  
 370 375 380  
 Ser Pro His Arg Trp Arg Pro Arg Lys Arg Ala Leu Ala Ser Cys Ser  
 385 390 395 400  
 Trp Cys Leu Gln Arg Val Thr Met Arg Arg Val Met Gly Val Gln Asp  
 405 410 415  
 Lys Ala Gly Asn Arg Asn Gln Met Leu Leu Leu Gly Gln Arg Pro Val  
 420 425 430  
 Ile Gly Asp Thr Val Ser Asn Ser Gln Thr Thr Arg Asp Lys Ala Cys  
 435 440 445  
 Arg Arg Pro Pro Ser His Ser Val Phe Thr Gln Ser Ser Phe Trp Ala  
 450 455 460  
 Cys Leu Asp Pro Asp Leu Phe Phe Tyr Gly His Gln Ser Tyr Trp Met  
 465 470 475 480  
 Lys Ala His Leu Asn Asp Leu Ile Leu Arg Glu Gly Pro Val Thr Gln  
 485 490 495  
 Met Ala Gln Ser Phe Tyr Trp Gly Phe Pro Ala Gly Gly Asn Leu Ser  
 500 505 510  
 Ala Leu Glu Met Leu Pro Asp Gly Pro Ala Pro Arg Thr Phe Leu Gln  
 515 520 525  
 Lys Lys Ser Cys Leu Phe Pro Leu Phe Ser Tyr Ile Leu Leu His Lys  
 530 535 540  
 Ala Gly Lys Leu Phe Gln Pro Asp Ala His Gly Phe Leu Val Lys Lys  
 545 550 555 560  
 Val His Ala Pro Thr Arg Gly Ile Val Phe Ile Met Glu Pro Arg Gln  
 565 570 575  
 Leu Gly Gly Lys Gly Ser Leu Ser Lys Leu Gln Pro Ala Cys Ala Leu  
 580 585 590

Gly Gly Met Asn Ser Gly Met Glu Pro Gln Lys Ser Ala Pro Phe Ala  
 595 600 605

Ala Gly Lys Gly Leu Ala Pro Pro Leu Pro Val Cys Asn Leu Arg Phe  
 610 615 620

Lys Leu Arg Val Tyr Lys Phe Glu Glu Leu Trp Ser Arg Ala Gly  
 625 630 635 640

Leu Gly Lys Lys Ser Asp Asn His Ser Ser Arg Gln Met Pro Trp Gly  
 645 650 655

Ala Ala Gly Val Ala Cys Gln His Pro Cys Lys Leu Pro Arg Ile Val  
 660 665 670

Ala Glu Leu Thr Pro Pro Lys Leu Ser Phe Gly Phe Leu Asn Thr Val  
 675 680 685

Gln Ser Ser Val Leu Pro Thr Ser Leu Ser Gln Phe Phe Leu Asn Asp  
 690 695 700

Ser Gln Pro Glu Glu Ala Ile Pro Pro Gln Ser Leu Leu Pro Gly Ser  
 705 710 715 720

Pro Arg Thr Asn Ser Phe Pro Lys Asp Lys Phe Val Pro Lys Asp Lys  
 725 730 735

Leu Lys Val Ile Leu Ser Leu Leu Thr Met Tyr Glu Leu Asp Arg Leu  
 740 745 750

Phe

<210> 69

<211> 712

<212> PRT

<213> Homo sapiens

<400> 69

Met Leu Ala Met Asp Thr Cys Lys His Val Gly Gln Leu Gln Leu Ala  
 1 5 10 15

Gln Asp His Ser Ser Leu Asn Pro Gln Lys Trp His Cys Val Asp Cys  
 20 25 30

Asn Thr Thr Glu Ser Ile Trp Ala Cys Leu Ser Cys Ser His Val Ala  
 35 40 45

Cys Gly Arg Tyr Ile Glu Glu His Ala Leu Lys His Phe Gln Glu Ser  
 50 55 60

Ser His Pro Val Ala Leu Glu Val Asn Glu Met Tyr Val Phe Cys Tyr  
 65 70 75 80

Leu Cys Asp Asp Tyr Val Leu Asn Asp Asn Ala Thr Gly Asp Leu Lys  
 85 90 95

Leu Leu Arg Arg Thr Leu Ser Ala Ile Lys Ser Gln Asn Tyr His Cys  
 100 105 110  
 Thr Thr Arg Ser Gly Arg Phe Leu Arg Ser Met Gly Thr Gly Asp Asp  
 115 120 125  
 Ser Tyr Phe Leu His Asp Gly Ala Gln Ser Leu Leu Gln Ser Glu Asp  
 130 135 140  
 Gln Leu Tyr Thr Ala Leu Trp His Arg Arg Ile Leu Met Gly Lys  
 145 150 155 160  
 Ile Phe Arg Thr Trp Phe Glu Gln Ser Pro Ile Gly Arg Lys Lys Gln  
 165 170 175  
 Glu Glu Pro Phe Gln Glu Lys Ile Val Val Lys Arg Glu Val Lys Lys  
 180 185 190  
 Arg Arg Gln Glu Leu Glu Tyr Gln Val Lys Ala Glu Leu Glu Ser Met  
 195 200 205  
 Pro Pro Arg Lys Ser Leu Arg Leu Gln Gly Leu Ala Gln Ser Thr Ile  
 210 215 220  
 Ile Glu Ile Val Ser Val Gln Val Pro Ala Gln Thr Pro Ala Ser Pro  
 225 230 235 240  
 Ala Lys Asp Lys Val Leu Ser Thr Ser Glu Asn Glu Ile Ser Gln Lys  
 245 250 255  
 Val Ser Asp Ser Ser Val Lys Arg Arg Pro Ile Val Thr Pro Gly Val  
 260 265 270  
 Thr Gly Leu Arg Asn Leu Gly Asn Thr Cys Tyr Met Asn Ser Val Leu  
 275 280 285  
 Gln Val Leu Ser His Leu Leu Ile Phe Arg Gln Cys Phe Leu Lys Leu  
 290 295 300  
 Asp Leu Asn Gln Trp Leu Ala Met Thr Ala Ser Glu Lys Thr Arg Ser  
 305 310 315 320  
 Cys Lys His Pro Pro Val Thr Asp Thr Val Val Tyr Gln Met Asn Glu  
 325 330 335  
 Cys Gln Glu Lys Asp Thr Gly Phe Val Cys Ser Arg Gln Ser Ser Leu  
 340 345 350  
 Ser Ser Gly Leu Ser Gly Gly Ala Ser Lys Gly Arg Lys Met Glu Leu  
 355 360 365  
 Ile Gln Pro Lys Glu Pro Thr Ser Gln Tyr Ile Ser Leu Cys His Glu  
 370 375 380  
 Leu His Thr Leu Phe Gln Val Met Trp Ser Gly Lys Trp Ala Leu Val  
 385 390 395 400

Ser Pro Phe Ala Met Leu His Ser Val Trp Arg Leu Ile Pro Ala Phe  
 405 410 415  
 Arg Gly Tyr Ala Gln Gln Asp Ala Gln Glu Phe Leu Cys Glu Leu Leu  
 420 425 430  
 Asp Lys Ile Gln Arg Glu Leu Glu Thr Thr Gly Thr Ser Leu Pro Ala  
 435 440 445  
 Leu Ile Pro Thr Ser Gln Arg Lys Leu Ile Lys Gln Val Leu Asn Val  
 450 455 460  
 Val Asn Asn Ile Phe His Gly Gln Leu Leu Ser Gln Val Thr Cys Leu  
 465 470 475 480  
 Ala Cys Asp Asn Lys Ser Asn Thr Ile Glu Pro Phe Trp Asp Leu Ser  
 485 490 495  
 Leu Glu Phe Pro Glu Arg Tyr Gln Cys Ser Gly Lys Asp Ile Ala Ser  
 500 505 510  
 Gln Pro Cys Leu Val Thr Glu Met Leu Ala Lys Phe Thr Glu Thr Glu  
 515 520 525  
 Ala Leu Glu Gly Lys Ile Tyr Val Cys Asp Gln Cys Asn Ser Lys Arg  
 530 535 540  
 Arg Arg Phe Ser Ser Lys Pro Val Val Leu Thr Glu Ala Gln Lys Gln  
 545 550 555 560  
 Leu Met Ile Cys His Leu Pro Gln Val Leu Arg Leu His Leu Lys Arg  
 565 570 575  
 Phe Arg Trp Ser Gly Arg Asn Asn Arg Glu Lys Ile Gly Val His Val  
 580 585 590  
 Gly Phe Glu Glu Ile Leu Asn Met Glu Pro Tyr Cys Cys Arg Glu Thr  
 595 600 605  
 Leu Lys Ser Leu Arg Pro Glu Cys Phe Ile Tyr Asp Leu Ser Ala Val  
 610 615 620  
 Val Met His His Gly Lys Gly Phe Gly Ser Gly His Tyr Thr Ala Tyr  
 625 630 635 640  
 Cys Tyr Asn Ser Glu Gly Gly Phe Trp Val His Cys Asn Asp Ser Lys  
 645 650 655  
 Leu Ser Met Cys Thr Met Asp Glu Val Cys Lys Ala Gln Ala Tyr Ile  
 660 665 670  
 Leu Phe Tyr Thr Gln Arg Val Thr Glu Asn Gly His Ser Lys Leu Leu  
 675 680 685  
 Pro Pro Glu Leu Leu Gly Ser Gln His Pro Asn Glu Asp Ala Asp  
 690 695 700

Thr Ser Ser Asn Glu Ile Leu Ser  
705 710

<210> 70  
<211> 289  
<212> PRT  
<213> Homo sapiens

<400> 70  
Met Arg Val Lys Asp Pro Thr Lys Ala Leu Pro Glu Lys Ala Lys Arg  
1 5 10 15

Ser Lys Arg Pro Thr Val Pro His Asp Glu Asp Ser Ser Asp Asp Ile  
20 25 30

Ala Val Gly Leu Thr Cys Gln His Val Ser His Ala Ile Ser Val Asn  
35 40 45

His Val Lys Arg Ala Ile Ala Glu Asn Leu Trp Ser Val Cys Ser Glu  
50 55 60

Cys Leu Glu Glu Arg Arg Phe Tyr Asp Gly Gln Leu Val Leu Thr Ser  
65 70 75 80

Asp Ile Trp Leu Cys Leu Lys Cys Gly Phe Gln Gly Cys Gly Lys Asn  
85 90 95

Ser Glu Ser Gln His Ser Leu Lys His Phe Lys Ser Ser Arg Thr Glu  
100 105 110

Pro His Cys Ile Ile Ile Asn Leu Ser Thr Trp Ile Ile Trp Cys Tyr  
115 120 125

Glu Cys Asp Glu Lys Leu Ser Thr His Cys Asn Lys Lys Val Leu Ala  
130 135 140

Gln Ile Val Asp Phe Leu Gln Lys His Ala Ser Lys Thr Gln Thr Ser  
145 150 155 160

Ala Phe Ser Arg Ile Met Lys Leu Cys Glu Glu Lys Cys Glu Thr Asp  
165 170 175

Glu Ile Gln Lys Gly Gly Lys Cys Arg Asn Leu Ser Val Arg Gly Ile  
180 185 190

Thr Asn Leu Gly Asn Thr Cys Phe Phe Asn Ala Val Met Gln Asn Leu  
195 200 205

Ala Gln Thr Tyr Thr Leu Thr Asp Leu Met Asn Glu Ile Lys Glu Ser  
210 215 220

Ser Thr Lys Leu Lys Ile Phe Pro Ser Ser Asp Ser Gln Leu Asp Pro  
225 230 235 240

Leu Val Val Glu Leu Ser Arg Pro Gly Pro Leu Thr Ser Ala Leu Phe  
245 250 255

Leu Phe Leu His Ser Met Lys Glu Thr Glu Lys Gly Pro Leu Ser Pro  
 260 265 270

Lys Val Leu Phe Asn Gln Leu Cys Gln Lys Arg Val His Leu His Leu  
 275 280 285

Ile

<210> 71  
 <211> 366  
 <212> PRT  
 <213> Homo sapiens

<400> 71  
 Met Thr Val Arg Asn Ile Ala Ser Ile Cys Asn Met Gly Thr Asn Ala  
 1 5 10 15

Ser Ala Leu Glu Lys Asp Ile Gly Pro Glu Gln Phe Pro Ile Asn Glu  
 20 25 30

His Tyr Phe Gly Leu Val Asn Phe Gly Asn Thr Cys Tyr Cys Asn Ser  
 35 40 45

Val Leu Gln Ala Leu Tyr Phe Cys Arg Pro Phe Arg Glu Asn Val Leu  
 50 55 60

Ala Tyr Lys Ala Gln Gln Lys Lys Glu Asn Leu Leu Thr Cys Leu  
 65 70 75 80

Ala Asp Leu Phe His Ser Ile Ala Thr Gln Lys Lys Val Gly Val  
 85 90 95

Ile Pro Pro Lys Lys Phe Ile Ser Arg Leu Arg Lys Glu Asn Asp Leu  
 100 105 110

Phe Asp Asn Tyr Met Gln Gln Asp Ala His Glu Phe Leu Asn Tyr Leu  
 115 120 125

Leu Asn Thr Ile Ala Asp Ile Leu Gln Glu Glu Lys Lys Gln Glu Lys  
 130 135 140

Gln Asn Gly Lys Leu Lys Asn Gly Asn Met Asn Glu Pro Ala Glu Asn  
 145 150 155 160

Asn Lys Pro Glu Leu Thr Trp Val His Glu Ile Phe Gln Gly Thr Leu  
 165 170 175

Thr Asn Glu Thr Arg Cys Leu Asn Cys Glu Thr Val Ser Ser Lys Asp  
 180 185 190

Glu Asp Phe Leu Asp Leu Ser Val Asp Val Glu Gln Asn Thr Ser Ile  
 195 200 205

Thr His Cys Leu Arg Asp Phe Ser Asn Thr Glu Thr Leu Cys Ser Glu  
 210 215 220

Gln Lys Tyr Tyr Cys Glu Thr Cys Cys Ser Lys Gln Glu Ala Gln Lys  
 225 230 235 240  
 Arg Met Arg Val Lys Lys Leu Pro Met Val Leu Ala Leu His Leu Lys  
 245 250 255  
 Arg Phe Lys Tyr Met Glu Gln Leu Arg Arg Tyr Thr Lys Leu Ser Tyr  
 260 265 270  
 Arg Val Val Phe Pro Leu Glu Leu Arg Leu Phe Asn Thr Ser Ser Asp  
 275 280 285  
 Ala Val Asn Leu Asp Arg Met Tyr Asp Leu Val Ala Val Val Val His  
 290 295 300  
 Cys Gly Ser Gly Pro Asn Arg Gly His Tyr Ile Thr Ile Val Lys Ser  
 305 310 315 320  
 His Gly Phe Trp Leu Leu Phe Asp Asp Asp Ile Val Glu Lys Ile Asp  
 325 330 335  
 Ala Gln Ala Ile Glu Glu Phe Tyr Gly Leu Thr Ser Asp Ile Ser Lys  
 340 345 350  
 Asn Ser Glu Ser Gly Tyr Ile Leu Phe Tyr Gln Ser Arg Glu  
 355 360 365

<210> 72  
 <211> 1287  
 <212> PRT  
 <213> Homo sapiens

<400> 72  
 Met Val Pro Gly Glu Glu Asn Gln Leu Val Pro Lys Glu Ala Pro Leu  
 1 5 10 15  
 Asp His Thr Ser Asp Lys Ser Leu Leu Asp Ala Asn Phe Glu Pro Gly  
 20 25 30  
 Lys Lys Asn Phe Leu His Leu Thr Asp Lys Asp Gly Glu Gln Pro Gln  
 35 40 45  
 Ile Leu Leu Glu Asp Ser Ser Ala Gly Glu Asp Ser Val His Asp Arg  
 50 55 60  
 Phe Ile Gly Pro Leu Pro Arg Glu Gly Ser Val Gly Ser Thr Ser Asp  
 65 70 75 80  
 Tyr Val Ser Gln Ser Tyr Ser Tyr Ser Ser Ile Leu Asn Lys Ser Glu  
 85 90 95  
 Thr Gly Tyr Val Gly Leu Val Asn Gln Ala Met Thr Cys Tyr Leu Asn  
 100 105 110  
 Ser Leu Leu Gln Thr Leu Phe Met Thr Pro Glu Phe Arg Asn Ala Leu  
 115 120 125

Tyr Lys Trp Glu Phe Glu Glu Ser Glu Glu Asp Pro Val Thr Ser Ile  
 130 135 140

Pro Tyr Gln Leu Gln Arg Leu Phe Val Leu Leu Gln Thr Ser Lys Lys  
 145 150 155 160

Arg Ala Ile Glu Thr Thr Asp Val Thr Arg Ser Phe Gly Trp Asp Ser  
 165 170 175

Ser Glu Ala Trp Gln Gln His Asp Val Gln Glu Leu Cys Arg Val Met  
 180 185 190

Phe Asp Ala Leu Glu Gln Lys Trp Lys Gln Thr Glu Gln Ala Asp Leu  
 195 200 205

Ile Asn Glu Leu Tyr Gln Gly Lys Leu Lys Asp Tyr Val Arg Cys Leu  
 210 215 220

Glu Cys Gly Tyr Glu Gly Trp Arg Ile Asp Thr Tyr Leu Asp Ile Pro  
 225 230 235 240

Leu Val Ile Arg Pro Tyr Gly Ser Ser Gln Ala Phe Ala Ser Val Glu  
 245 250 255

Glu Ala Leu His Ala Phe Ile Gln Pro Glu Ile Leu Asp Gly Pro Asn  
 260 265 270

Gln Tyr Phe Cys Glu Arg Cys Lys Lys Cys Asp Ala Arg Lys Gly  
 275 280 285

Leu Arg Phe Leu His Phe Pro Tyr Leu Leu Thr Leu Gln Leu Lys Arg  
 290 295 300

Phe Asp Phe Asp Tyr Thr Thr Met His Arg Ile Lys Leu Asn Asp Arg  
 305 310 315 320

Met Thr Phe Pro Glu Glu Leu Asp Met Ser Thr Phe Ile Asp Val Glu  
 325 330 335

Asp Glu Lys Ser Pro Gln Thr Glu Ser Cys Thr Asp Ser Gly Ala Glu  
 340 345 350

Asn Glu Gly Ser Cys His Ser Asp Gln Met Ser Asn Asp Phe Ser Asn  
 355 360 365

Asp Asp Gly Val Asp Glu Gly Ile Cys Leu Glu Thr Asn Ser Gly Thr  
 370 375 380

Glu Lys Ile Ser Lys Ser Gly Leu Glu Lys Asn Ser Leu Ile Tyr Glu  
 385 390 395 400

Leu Phe Ser Val Met Ala His Ser Gly Ser Ala Ala Gly Gly His Tyr  
 405 410 415

Tyr Ala Cys Ile Lys Ser Phe Ser Asp Glu Gln Trp Tyr Ser Phe Asp  
 420 425 430

Asp Gln His Val Ser Arg Ile Thr Gln Glu Asp Ile Lys Lys Thr His  
 435 440 445  
 Gly Gly Ser Ser Gly Ser Arg Gly Tyr Tyr Ser Ser Ala Phe Ala Ser  
 450 455 460  
 Ser Thr Asn Ala Tyr Met Leu Ile Tyr Arg Leu Lys Asp Pro Ala Arg  
 465 470 475 480  
 Asn Ala Lys Phe Leu Glu Val Gly Glu Tyr Pro Glu His Ile Lys Asn  
 485 490 495  
 Leu Val Gln Lys Glu Arg Glu Leu Glu Glu Gln Glu Lys Arg Gln Arg  
 500 505 510  
 Glu Ile Glu Arg Asn Thr Cys Lys Ile Lys Leu Phe Cys Leu His Pro  
 515 520 525  
 Thr Lys Gln Val Met Met Glu Asn Lys Leu Glu Val His Lys Asp Lys  
 530 535 540  
 Thr Leu Lys Glu Ala Val Glu Met Ala Tyr Lys Met Met Asp Leu Glu  
 545 550 555 560  
 Glu Val Ile Pro Leu Asp Cys Cys Arg Leu Val Lys Tyr Asp Glu Phe  
 565 570 575  
 His Asp Tyr Leu Glu Arg Ser Tyr Glu Gly Glu Glu Asp Thr Pro Met  
 580 585 590  
 Gly Leu Leu Leu Gly Gly Val Lys Ser Thr Tyr Met Phe Asp Leu Leu  
 595 600 605  
 Leu Glu Thr Arg Lys Pro Asp Gln Val Phe Gln Ser Tyr Lys Pro Gly  
 610 615 620  
 Glu Val Met Val Lys Val His Val Val Asp Leu Lys Ala Glu Ser Val  
 625 630 635 640  
 Ala Ala Pro Ile Thr Val Arg Ala Tyr Leu Asn Gln Thr Val Thr Glu  
 645 650 655  
 Phe Lys Gln Leu Ile Ser Lys Ala Ile His Leu Pro Ala Glu Thr Met  
 660 665 670  
 Arg Ile Val Leu Glu Arg Cys Tyr Asn Asp Leu Arg Leu Leu Ser Val  
 675 680 685  
 Ser Ser Lys Thr Leu Lys Ala Glu Gly Phe Phe Arg Ser Asn Lys Val  
 690 695 700  
 Phe Val Glu Ser Ser Glu Thr Leu Asp Tyr Gln Met Ala Phe Ala Asp  
 705 710 715 720  
 Ser His Leu Trp Lys Leu Leu Asp Arg His Ala Asn Thr Ile Arg Leu  
 725 730 735

Phe Val Leu Leu Pro Glu Gln Ser Pro Val Ser Tyr Ser Lys Arg Thr  
 740 745 750  
 Ala Tyr Gln Lys Ala Gly Gly Asp Ser Gly Asn Val Asp Asp Asp Cys  
 755 760 765  
 Glu Arg Val Lys Gly Pro Val Gly Ser Leu Lys Ser Val Glu Ala Ile  
 770 775 780  
 Leu Glu Glu Ser Thr Glu Lys Leu Lys Ser Leu Ser Leu Gln Gln  
 785 790 795 800  
 Gln Asp Gly Asp Asn Gly Asp Ser Ser Lys Ser Thr Glu Thr Ser Asp  
 805 810 815  
 Phe Glu Asn Ile Glu Ser Pro Leu Asn Glu Arg Asp Ser Ser Ala Ser  
 820 825 830  
 Val Asp Asn Arg Glu Leu Glu Gln His Ile Gln Thr Ser Asp Pro Glu  
 835 840 845  
 Asn Phe Gln Ser Glu Glu Arg Ser Asp Ser Asp Val Asn Asn Asp Arg  
 850 855 860  
 Ser Thr Ser Ser Val Asp Ser Asp Ile Leu Ser Ser Ser His Ser Ser  
 865 870 875 880  
 Asp Thr Leu Cys Asn Ala Asp Asn Ala Gln Ile Pro Leu Ala Asn Gly  
 885 890 895  
 Leu Asp Ser His Ser Ile Thr Ser Ser Arg Arg Thr Lys Ala Asn Glu  
 900 905 910  
 Gly Lys Lys Glu Thr Trp Asp Thr Ala Glu Glu Asp Ser Gly Thr Asp  
 915 920 925  
 Ser Glu Tyr Asp Glu Ser Gly Lys Ser Arg Gly Glu Met Gln Tyr Met  
 930 935 940  
 Tyr Phe Lys Ala Glu Pro Tyr Ala Ala Asp Glu Gly Ser Gly Glu Gly  
 945 950 955 960  
 His Lys Trp Leu Met Val His Val Asp Lys Arg Ile Thr Leu Ala Ala  
 965 970 975  
 Phe Lys Gln His Leu Glu Pro Phe Val Gly Val Leu Ser Ser His Phe  
 980 985 990  
 Lys Val Phe Arg Val Tyr Ala Ser Asn Gln Glu Phe Glu Ser Val Arg  
 995 1000 1005  
 Leu Asn Glu Thr Leu Ser Ser Phe Ser Asp Asp Asn Lys Ile Thr Ile  
 1010 1015 1020  
 Arg Leu Gly Arg Ala Leu Lys Lys Gly Glu Tyr Arg Val Lys Val Tyr  
 1025 1030 1035 1040

Gln Leu Leu Val Asn Glu Gln Glu Pro Cys Lys Phe Leu Leu Asp Ala  
 1045 1050 1055  
 Val Phe Ala Lys Gly Met Thr Val Arg Gln Ser Lys Glu Glu Leu Ile  
 1060 1065 1070  
 Pro Gln Leu Arg Glu Gln Cys Gly Leu Glu Leu Ser Ile Asp Arg Phe  
 1075 1080 1085  
 Arg Leu Arg Lys Lys Thr Trp Lys Asn Pro Gly Thr Val Phe Leu Asp  
 1090 1095 1100  
 Tyr His Ile Tyr Glu Glu Asp Ile Asn Ile Ser Ser Asn Trp Glu Val  
 1105 1110 1115 1120  
 Phe Leu Glu Val Leu Asp Gly Val Glu Lys Met Lys Ser Met Ser Gln  
 1125 1130 1135  
 Leu Ala Val Leu Ser Arg Arg Trp Lys Pro Ser Glu Met Lys Leu Asp  
 1140 1145 1150  
 Pro Phe Gln Glu Val Val Leu Glu Ser Ser Ser Val Asp Glu Leu Arg  
 1155 1160 1165  
 Glu Lys Leu Ser Glu Ile Ser Gly Ile Pro Leu Asp Asp Ile Glu Phe  
 1170 1175 1180  
 Ala Lys Gly Arg Gly Thr Phe Pro Cys Asp Ile Ser Val Leu Asp Ile  
 1185 1190 1195 1200  
 His Gln Asp Leu Asp Trp Asn Pro Lys Val Ser Thr Leu Asn Val Trp  
 1205 1210 1215  
 Pro Leu Tyr Ile Cys Asp Asp Gly Ala Val Ile Phe Tyr Arg Asp Lys  
 1220 1225 1230  
 Thr Glu Glu Leu Met Glu Leu Thr Asp Glu Gln Arg Asn Glu Leu Met  
 1235 1240 1245  
 Lys Lys Glu Ser Ser Arg Leu Gln Lys Thr Gly His Arg Val Thr Tyr  
 1250 1255 1260  
 Ser Pro Arg Lys Glu Lys Ala Leu Lys Ile Tyr Leu Asp Gly Ala Pro  
 1265 1270 1275 1280  
 Asn Lys Asp Leu Thr Gln Asp  
 1285

<210> 73  
 <211> 1604  
 <212> PRT  
 <213> Homo sapiens

<400> 73  
 Met Gly Ala Lys Glu Ser Arg Ile Gly Phe Leu Ser Tyr Glu Glu Ala  
 1 5 10 15

Leu Arg Arg Val Thr Asp Val Glu Leu Lys Arg Leu Lys Asp Ala Phe  
 20 25 30

Lys Arg Thr Cys Gly Leu Ser Tyr Tyr Met Gly Gln His Cys Phe Ile  
 35 40 45

Arg Glu Val Leu Gly Asp Gly Val Pro Pro Lys Val Ala Glu Val Ile  
 50 55 60

Tyr Cys Ser Phe Gly Gly Thr Ser Lys Gly Leu His Phe Asn Asn Leu  
 65 70 75 80

Ile Val Gly Leu Val Leu Leu Thr Arg Gly Lys Asp Glu Glu Lys Ala  
 85 90 95

Lys Tyr Ile Phe Ser Leu Phe Ser Ser Glu Ser Gly Asn Tyr Val Ile  
 100 105 110

Arg Glu Glu Met Glu Arg Met Leu His Val Val Asp Gly Lys Val Pro  
 115 120 125

Asp Thr Leu Arg Lys Cys Phe Ser Glu Gly Glu Lys Val Asn Tyr Glu  
 130 135 140

Lys Phe Arg Asn Trp Leu Phe Leu Asn Lys Asp Ala Phe Thr Phe Ser  
 145 150 155 160

Arg Trp Leu Leu Ser Gly Gly Val Tyr Val Thr Leu Thr Asp Asp Ser  
 165 170 175

Asp Thr Pro Thr Phe Tyr Gln Thr Leu Ala Gly Val Thr His Leu Glu  
 180 185 190

Glu Ser Asp Ile Ile Asp Leu Glu Lys Arg Tyr Trp Leu Leu Lys Ala  
 195 200 205

Gln Ser Arg Thr Gly Arg Phe Asp Leu Glu Thr Phe Gly Pro Leu Val  
 210 215 220

Ser Pro Pro Ile Arg Pro Ser Leu Ser Glu Gly Leu Phe Asn Ala Phe  
 225 230 235 240

Asp Glu Asn Arg Asp Asn His Ile Asp Phe Lys Glu Ile Ser Cys Gly  
 245 250 255

Leu Ser Ala Cys Cys Arg Gly Pro Leu Ala Glu Arg Gln Lys Phe Cys  
 260 265 270

Phe Lys Val Phe Asp Val Asp Arg Asp Gly Val Leu Ser Arg Val Glu  
 275 280 285

Leu Arg Asp Met Val Val Ala Leu Leu Glu Val Trp Lys Asp Asn Arg  
 290 295 300

Thr Asp Asp Ile Pro Glu Leu His Met Asp Leu Ser Asp Ile Val Glu  
 305 310 315 320

Gly Ile Leu Asn Ala His Asp Thr Thr Lys Met Gly His Leu Thr Leu  
 325 330 335

Glu Asp Tyr Gln Ile Trp Ser Val Lys Asn Val Leu Ala Asn Glu Phe  
 340 345 350

Leu Asn Leu Leu Phe Gln Val Cys His Ile Val Leu Gly Leu Arg Pro  
 355 360 365

Ala Thr Pro Glu Glu Gly Gln Ile Ile Arg Gly Trp Leu Glu Arg  
 370 375 380

Glu Ser Arg Tyr Gly Leu Gln Ala Gly His Asn Trp Phe Ile Ile Ser  
 385 390 395 400

Met Gln Trp Trp Gln Gln Trp Lys Glu Tyr Val Lys Tyr Asp Ala Asn  
 405 410 415

Pro Val Val Ile Glu Pro Ser Ser Val Leu Asn Gly Gly Lys Tyr Ser  
 420 425 430

Phe Gly Thr Ala Ala His Pro Met Glu Gln Val Glu Asp Arg Ile Gly  
 435 440 445

Ser Ser Leu Ser Tyr Val Asn Thr Thr Glu Glu Lys Phe Ser Asp Asn  
 450 455 460

Ile Ser Thr Ala Ser Glu Ala Ser Glu Thr Ala Gly Ser Gly Phe Leu  
 465 470 475 480

Tyr Ser Ala Thr Pro Gly Ala Asp Val Cys Phe Ala Arg Gln His Asn  
 485 490 495

Thr Ser Asp Asn Asn Gln Cys Leu Leu Gly Ala Asn Gly Asn Ile  
 500 505 510

Leu Leu His Leu Asn Pro Gln Lys Pro Gly Ala Ile Asp Asn Gln Pro  
 515 520 525

Leu Val Thr Gln Glu Pro Val Lys Ala Thr Ser Leu Thr Leu Glu Gly  
 530 535 540

Gly Arg Leu Lys Arg Thr Pro Gln Leu Ile His Gly Arg Asp Tyr Glu  
 545 550 555 560

Met Val Pro Glu Pro Val Trp Arg Ala Leu Tyr His Trp Tyr Gly Ala  
 565 570 575

Asn Leu Ala Leu Pro Arg Pro Val Ile Lys Asn Ser Lys Thr Asp Ile  
 580 585 590

Pro Glu Leu Glu Leu Phe Pro Arg Tyr Leu Leu Phe Leu Arg Gln Gln  
 595 600 605

Pro Ala Thr Arg Thr Gln Gln Ser Asn Ile Trp Val Asn Met Gly Asn  
 610 615 620

Val Pro Ser Pro Asn Ala Pro Leu Lys Arg Val Leu Ala Tyr Thr Gly  
 625 630 635 640  
 Cys Phe Ser Arg Met Gln Thr Ile Lys Glu Ile His Glu Tyr Leu Ser  
 645 650 655  
 Gln Arg Leu Arg Ile Lys Glu Glu Asp Met Arg Leu Trp Leu Tyr Asn  
 660 665 670  
 Ser Glu Asn Tyr Leu Thr Leu Leu Asp Asp Glu Asp His Lys Leu Glu  
 675 680 685  
 Tyr Leu Lys Ile Gln Asp Glu Gln His Leu Val Ile Glu Val Arg Asn  
 690 695 700  
 Lys Asp Met Ser Trp Pro Glu Glu Met Ser Phe Ile Ala Asn Ser Ser  
 705 710 715 720  
 Lys Ile Asp Arg His Lys Val Pro Thr Glu Lys Gly Ala Thr Gly Leu  
 725 730 735  
 Ser Asn Leu Gly Asn Thr Cys Phe Met Asn Ser Ser Ile Gln Cys Val  
 740 745 750  
 Ser Asn Thr Gln Pro Leu Thr Gln Tyr Phe Ile Ser Gly Arg His Leu  
 755 760 765  
 Tyr Glu Leu Asn Arg Thr Asn Pro Ile Gly Met Lys Gly His Met Ala  
 770 775 780  
 Lys Cys Tyr Gly Asp Leu Val Gln Glu Leu Trp Ser Gly Thr Gln Lys  
 785 790 795 800  
 Asn Val Ala Pro Leu Lys Leu Arg Trp Thr Ile Ala Lys Tyr Ala Pro  
 805 810 815  
 Arg Phe Asn Gly Phe Gln Gln Gln Asp Ser Gln Glu Leu Leu Ala Phe  
 820 825 830  
 Leu Leu Asp Gly Leu His Glu Asp Leu Asn Arg Val His Glu Lys Pro  
 835 840 845  
 Tyr Val Glu Leu Lys Asp Ser Asp Gly Arg Pro Asp Trp Glu Val Ala  
 850 855 860  
 Ala Glu Ala Trp Asp Asn His Leu Arg Arg Asn Arg Ser Ile Val Val  
 865 870 875 880  
 Asp Leu Phe His Gly Gln Leu Arg Ser Gln Val Lys Cys Lys Thr Cys  
 885 890 895  
 Gly His Ile Ser Val Arg Phe Asp Pro Phe Asn Phe Leu Ser Leu Pro  
 900 905 910  
 Leu Pro Met Asp Ser Tyr Met His Leu Glu Ile Thr Val Ile Lys Leu  
 915 920 925

Asp Gly Thr Thr Pro Val Arg Tyr Gly Leu Arg Leu Asn Met Asp Glu  
 930 935 940

Lys Tyr Thr Gly Leu Lys Lys Gln Leu Ser Asp Leu Cys Gly Leu Asn  
 945 950 955 960

Ser Glu Gln Ile Leu Leu Ala Glu Val His Gly Ser Asn Ile Lys Asn  
 965 970 975

Phe Pro Gln Asp Asn Gln Lys Val Arg Leu Ser Val Ser Gly Phe Leu  
 980 985 990

Cys Ala Phe Glu Ile Pro Val Pro Val Ser Pro Ile Ser Ala Ser Ser  
 995 1000 1005

Pro Thr Gln Thr Asp Phe Ser Ser Ser Pro Ser Thr Asn Glu Met Phe  
 1010 1015 1020

Thr Leu Thr Thr Asn Gly Asp Leu Pro Arg Pro Ile Phe Ile Pro Asn  
 1025 1030 1035 1040

Gly Met Pro Asn Thr Val Val Pro Cys Gly Thr Glu Lys Asn Phe Thr  
 1045 1050 1055

Asn Gly Met Val Asn Gly His Met Pro Ser Leu Pro Asp Ser Pro Phe  
 1060 1065 1070

Thr Gly Tyr Ile Ile Ala Val His Arg Lys Met Met Arg Thr Glu Leu  
 1075 1080 1085

Tyr Phe Leu Ser Ser Gln Lys Asn Arg Pro Ser Leu Phe Gly Met Pro  
 1090 1095 1100

Leu Ile Val Pro Cys Thr Val His Thr Arg Lys Lys Asp Leu Tyr Asp  
 1105 1110 1115 1120

Ala Val Trp Ile Gln Val Ser Arg Leu Ala Ser Pro Leu Pro Pro Gln  
 1125 1130 1135

Glu Ala Ser Asn His Ala Gln Asp Cys Asp Asp Ser Met Gly Tyr Gln  
 1140 1145 1150

Tyr Pro Phe Thr Leu Arg Val Val Gln Lys Asp Gly Asn Ser Cys Ala  
 1155 1160 1165

Trp Cys Pro Trp Tyr Arg Phe Cys Arg Gly Cys Lys Ile Asp Cys Gly  
 1170 1175 1180

Glu Asp Arg Ala Phe Ile Gly Asn Ala Tyr Ile Ala Val Asp Trp Asp  
 1185 1190 1195 1200

Pro Thr Ala Leu His Leu Arg Tyr Gln Thr Ser Gln Glu Arg Val Val  
 1205 1210 1215

Asp Glu His Glu Ser Val Glu Gln Ser Arg Arg Ala Gln Ala Glu Pro  
 1220 1225 1230

Ile Asn Leu Asp Ser Cys Leu Arg Ala Phe Thr Ser Glu Glu Glu Leu  
 1235 1240 1245

Gly Glu Asn Glu Met Tyr Tyr Cys Ser Lys Cys Lys Thr His Cys Leu  
 1250 1255 1260

Ala Thr Lys Lys Leu Asp Leu Trp Arg Leu Pro Pro Ile Leu Ile Ile  
 1265 1270 1275 1280

His Leu Lys Arg Phe Gln Phe Val Asn Gly Arg Trp Ile Lys Ser Gln  
 1285 1290 1295

Lys Ile Val Lys Phe Pro Arg Glu Ser Phe Asp Pro Ser Ala Phe Leu  
 1300 1305 1310

Val Pro Arg Asp Pro Ala Leu Cys Gln His Lys Pro Leu Thr Pro Gln  
 1315 1320 1325

Gly Asp Glu Leu Ser Glu Pro Arg Ile Leu Ala Arg Glu Val Lys Lys  
 1330 1335 1340

Val Asp Ala Gln Ser Ser Ala Gly Glu Glu Asp Val Leu Leu Ser Lys  
 1345 1350 1355 1360

Ser Pro Ser Ser Leu Ser Ala Asn Ile Ile Ser Ser Pro Lys Gly Ser  
 1365 1370 1375

Pro Ser Ser Ser Arg Lys Ser Gly Thr Ser Cys Pro Ser Ser Lys Asn  
 1380 1385 1390

Ser Ser Pro Asn Ser Ser Pro Arg Thr Leu Gly Arg Ser Lys Gly Arg  
 1395 1400 1405

Leu Arg Leu Pro Gln Ile Gly Ser Lys Asn Lys Leu Ser Ser Ser Lys  
 1410 1415 1420

Glu Asn Leu Asp Ala Ser Lys Glu Asn Gly Ala Gly Gln Ile Cys Glu  
 1425 1430 1435 1440

Leu Ala Asp Ala Leu Ser Arg Gly His Val Leu Gly Gly Ser Gln Pro  
 1445 1450 1455

Glu Leu Val Thr Pro Gln Asp His Glu Val Ala Leu Ala Asn Gly Phe  
 1460 1465 1470

Leu Tyr Glu His Glu Ala Cys Gly Asn Gly Tyr Ser Asn Gly Gln Leu  
 1475 1480 1485

Gly Asn His Ser Glu Glu Asp Ser Thr Asp Asp Gln Arg Glu Asp Thr  
 1490 1495 1500

Arg Ile Lys Pro Ile Tyr Asn Leu Tyr Ala Ile Ser Cys His Ser Gly  
 1505 1510 1515 1520

Ile Leu Gly Gly His Tyr Val Thr Tyr Ala Lys Asn Pro Asn Cys  
 1525 1530 1535

Lys Trp Tyr Cys Tyr Asn Asp Ser Ser Cys Lys Glu Leu His Pro Asp  
 1540 1545 1550

Glu Ile Asp Thr Asp Ser Ala Tyr Ile Leu Phe Tyr Glu Gln Gln Gly  
 1555 1560 1565

Ile Asp Tyr Ala Gln Phe Leu Pro Lys Thr Asp Gly Lys Lys Met Ala  
 1570 1575 1580

Asp Thr Ser Ser Met Asp Glu Asp Phe Glu Ser Asp Tyr Lys Lys Tyr  
 1585 1590 1595 1600

Cys Val Leu Gln

<210> 74

<211> 1042

<212> PRT

<213> Homo sapiens

<400> 74

Met Asp Lys Ile Leu Glu Gly Leu Val Ser Ser Ser His Pro Leu Pro  
 1 5 10 15

Leu Lys Arg Val Ile Val Arg Lys Val Val Glu Ser Ala Glu His Trp  
 20 25 30

Leu Asp Glu Ala Gln Cys Glu Ala Met Phe Asp Leu Thr Thr Arg Leu  
 35 40 45

Ile Leu Glu Gly Gln Asp Pro Phe Gln Arg Gln Val Gly His Gln Val  
 50 55 60

Leu Glu Ala Tyr Ala Arg Tyr His Arg Pro Glu Phe Glu Ser Phe Phe  
 65 70 75 80

Asn Lys Thr Phe Val Leu Gly Leu Leu His Gln Gly Tyr His Ser Leu  
 85 90 95

Asp Arg Lys Asp Val Ala Ile Leu Asp Tyr Ile His Asn Gly Leu Lys  
 100 105 110

Leu Ile Met Ser Cys Pro Ser Val Leu Asp Leu Phe Ser Leu Leu Gln  
 115 120 125

Val Glu Val Leu Arg Met Val Cys Glu Arg Pro Glu Pro Gln Leu Cys  
 130 135 140

Ala Arg Leu Ser Asp Leu Leu Thr Asp Phe Val Gln Cys Ile Pro Lys  
 145 150 155 160

Gly Lys Leu Ser Ile Thr Phe Cys Gln Gln Leu Val Arg Thr Ile Gly  
 165 170 175

His Phe Gln Cys Val Ser Thr Gln Glu Arg Glu Leu Arg Glu Tyr Val  
 180 185 190

Ser Gln Val Thr Lys Val Ser Asn Leu Leu Gln Asn Ile Trp Lys Ala  
 195 200 205

Glu Pro Ala Thr Leu Leu Pro Ser Leu Gln Glu Val Phe Ala Ser Ile  
 210 215 220

Ser Ser Thr Asp Ala Ser Phe Glu Pro Ser Val Ala Leu Ala Ser Leu  
 225 230 235 240

Val Gln His Ile Pro Leu Gln Met Ile Thr Val Leu Ile Arg Ser Leu  
 245 250 255

Thr Thr Asp Pro Asn Val Lys Asp Ala Ser Met Thr Gln Ala Leu Cys  
 260 265 270

Arg Met Ile Asp Trp Leu Ser Trp Pro Leu Ala Gln His Val Asp Thr  
 275 280 285

Trp Val Ile Ala Leu Leu Lys Gly Leu Ala Ala Val Gln Lys Phe Thr  
 290 295 300

Ile Leu Ile Asp Val Thr Leu Leu Lys Ile Glu Leu Val Phe Asn Arg  
 305 310 315 320

Leu Trp Phe Pro Leu Val Arg Pro Gly Ala Leu Ala Val Leu Ser His  
 325 330 335

Met Leu Leu Ser Phe Gln His Ser Pro Glu Ala Phe His Leu Ile Val  
 340 345 350

Pro His Val Val Asn Leu Val His Ser Phe Lys Asn Asp Gly Leu Pro  
 355 360 365

Ser Ser Thr Ala Phe Leu Val Gln Leu Thr Glu Leu Ile His Cys Met  
 370 375 380

Met Tyr His Tyr Ser Gly Phe Pro Asp Leu Tyr Glu Pro Ile Leu Glu  
 385 390 395 400

Ala Ile Lys Asp Phe Pro Lys Pro Ser Glu Glu Lys Ile Lys Leu Ile  
 405 410 415

Leu Asn Gln Ser Ala Trp Thr Ser Gln Ser Asn Ser Leu Ala Ser Cys  
 420 425 430

Leu Ser Arg Leu Ser Gly Lys Ser Glu Thr Gly Lys Thr Gly Leu Ile  
 435 440 445

Asn Leu Gly Asn Thr Cys Tyr Met Asn Ser Val Ile Gln Ala Leu Phe  
 450 455 460

Met Ala Thr Asp Phe Arg Arg Gln Val Leu Ser Leu Asn Leu Asn Gly  
 465 470 475 480

Cys Asn Ser Leu Met Lys Lys Leu Gln His Leu Phe Ala Phe Leu Ala  
 485 490 495

His Thr Gln Arg Glu Ala Tyr Ala Pro Arg Ile Phe Phe Glu Ala Ser  
 500 505 510  
 Arg Pro Pro Trp Phe Thr Pro Arg Ser Gln Gln Asp Cys Ser Glu Tyr  
 515 520 525  
 Leu Arg Phe Leu Leu Asp Arg Leu His Glu Glu Lys Ile Leu Lys  
 530 535 540  
 Val Gln Ala Ser His Lys Pro Ser Glu Ile Leu Glu Cys Ser Glu Thr  
 545 550 555 560  
 Ser Leu Gln Glu Val Ala Ser Lys Ala Ala Val Leu Thr Glu Thr Pro  
 565 570 575  
 Arg Thr Ser Asp Gly Glu Lys Thr Leu Ile Glu Lys Met Phe Gly Gly  
 580 585 590  
 Lys Leu Arg Thr His Ile Arg Cys Leu Asn Cys Arg Ser Thr Ser Gln  
 595 600 605  
 Lys Val Glu Ala Phe Thr Asp Leu Ser Leu Ala Phe Cys Pro Ser Ser  
 610 615 620  
 Ser Leu Glu Asn Met Ser Val Gln Asp Pro Ala Ser Ser Pro Ser Ile  
 625 630 635 640  
 Gln Asp Gly Gly Leu Met Gln Ala Ser Val Pro Gly Pro Ser Glu Glu  
 645 650 655  
 Pro Val Val Tyr Asn Pro Thr Thr Ala Ala Phe Ile Cys Asp Ser Leu  
 660 665 670  
 Val Asn Glu Lys Thr Ile Gly Ser Pro Pro Asn Glu Phe Tyr Cys Ser  
 675 680 685  
 Glu Asn Thr Ser Val Pro Asn Glu Ser Asn Lys Ile Leu Val Asn Lys  
 690 695 700  
 Asp Val Pro Gln Lys Pro Gly Gly Glu Thr Thr Pro Ser Val Thr Asp  
 705 710 715 720  
 Leu Leu Asn Tyr Phe Leu Ala Pro Glu Ile Leu Thr Gly Asp Asn Gln  
 725 730 735  
 Tyr Tyr Cys Glu Asn Cys Ala Ser Leu Gln Asn Ala Glu Lys Thr Met  
 740 745 750  
 Gln Ile Thr Glu Glu Pro Glu Tyr Leu Ile Leu Thr Leu Leu Arg Phe  
 755 760 765  
 Ser Tyr Asp Gln Lys Tyr His Val Arg Arg Lys Ile Leu Asp Asn Val  
 770 775 780  
 Ser Leu Pro Leu Val Leu Glu Leu Pro Val Lys Arg Ile Thr Ser Phe  
 785 790 795 800

Ser Ser Leu Ser Glu Ser Trp Ser Val Asp Val Asp Phe Thr Asp Leu  
 805 810 815

Ser Glu Asn Leu Ala Lys Lys Leu Lys Pro Ser Gly Thr Asp Glu Ala  
 820 825 830

Ser Cys Thr Lys Leu Val Pro Tyr Leu Leu Ser Ser Val Val Val His  
 835 840 845

Ser Gly Ile Ser Ser Glu Ser Gly His Tyr Tyr Ser Tyr Ala Arg Asn  
 850 855 860

Ile Thr Ser Thr Asp Ser Ser Tyr Gln Met Tyr His Gln Ser Glu Ala  
 865 870 875 880

Leu Ala Leu Ala Ser Ser Gln Ser His Leu Leu Gly Arg Asp Ser Pro  
 885 890 895

Ser Ala Val Phe Glu Gln Asp Leu Glu Asn Lys Glu Met Ser Lys Glu  
 900 905 910

Trp Phe Leu Phe Asn Asp Ser Arg Val Thr Phe Thr Ser Phe Gln Ser  
 915 920 925

Val Gln Lys Ile Thr Ser Arg Phe Pro Lys Asp Thr Ala Tyr Val Leu  
 930 935 940

Leu Tyr Lys Lys Gln His Ser Thr Asn Gly Leu Ser Gly Asn Asn Pro  
 945 950 955 960

Thr Ser Gly Leu Trp Ile Asn Gly Asp Pro Pro Leu Gln Lys Glu Leu  
 965 970 975

Met Asp Ala Ile Thr Lys Asp Asn Lys Leu Tyr Leu Gln Glu Gln Glu  
 980 985 990

Leu Asn Ala Arg Ala Arg Ala Leu Gln Ala Ala Ser Ala Ser Cys Ser  
 995 1000 1005

Phe Arg Pro Asn Gly Phe Asp Asp Asn Asp Pro Pro Gly Ser Cys Gly  
 1010 1015 1020

Pro Thr Gly Gly Gly Gly Gly Phe Asn Thr Val Gly Arg Leu  
 1025 1030 1035 1040

Val Phe

<210> 75  
 <211> 1033  
 <212> PRT  
 <213> Homo sapiens

<400> 75  
 Met Ala Pro Arg Leu Gln Leu Glu Lys Ala Ala Trp Arg Trp Ala Glu  
 1 5 10 15

Thr Val Arg Pro Glu Glu Val Ser Gln Glu His Ile Glu Thr Ala Tyr  
 20 25 30

Arg Ile Trp Leu Glu Pro Cys Ile Arg Gly Val Cys Arg Arg Asn Cys  
 35 40 45

Lys Gly Asn Pro Asn Cys Leu Val Gly Ile Gly Glu His Ile Trp Leu  
 50 55 60

Gly Glu Ile Asp Glu Asn Ser Phe His Asn Ile Asp Asp Pro Asn Cys  
 65 70 75 80

Glu Arg Arg Lys Lys Asn Ser Phe Val Gly Leu Thr Asn Leu Gly Ala  
 85 90 95

Thr Cys Tyr Val Asn Thr Phe Leu Gln Val Trp Phe Leu Asn Leu Glu  
 100 105 110

Leu Arg Gln Ala Leu Tyr Leu Cys Pro Ser Thr Cys Ser Asp Tyr Met  
 115 120 125

Leu Gly Asp Gly Ile Gln Glu Glu Lys Asp Tyr Glu Pro Gln Thr Ile  
 130 135 140

Cys Glu His Leu Gln Tyr Leu Phe Ala Leu Leu Gln Asn Ser Asn Arg  
 145 150 155 160

Arg Tyr Ile Asp Pro Ser Gly Phe Val Lys Ala Leu Gly Leu Asp Thr  
 165 170 175

Gly Gln Gln Asp Ala Gln Glu Phe Ser Lys Leu Phe Met Ser Leu  
 180 185 190

Leu Glu Asp Thr Leu Ser Lys Gln Lys Asn Pro Asp Val Arg Asn Ile  
 195 200 205

Val Gln Gln Gln Phe Cys Gly Glu Tyr Ala Tyr Val Thr Val Cys Asn  
 210 215 220

Gln Cys Gly Arg Glu Ser Lys Leu Leu Ser Lys Phe Tyr Glu Leu Glu  
 225 230 235 240

Leu Asn Ile Gln Gly His Lys Gln Leu Thr Asp Cys Ile Ser Glu Phe  
 245 250 255

Leu Lys Glu Glu Lys Leu Glu Gly Asp Asn Arg Tyr Phe Cys Glu Asn  
 260 265 270

Cys Gln Ser Lys Gln Asn Ala Thr Arg Lys Ile Arg Leu Leu Ser Leu  
 275 280 285

Pro Cys Thr Leu Asn Leu Gln Leu Met Arg Phe Val Phe Asp Arg Gln  
 290 295 300

Thr Gly His Lys Lys Lys Leu Asn Thr Tyr Ile Gly Phe Ser Glu Ile  
 305 310 315 320

Leu Asp Met Glu Pro Tyr Val Glu His Lys Gly Gly Ser Tyr Val Tyr  
 325 330 335

Glu Leu Ser Ala Val Leu Ile His Arg Gly Val Ser Ala Tyr Ser Gly  
 340 345 350

His Tyr Ile Ala His Val Lys Asp Pro Gln Ser Gly Glu Trp Tyr Lys  
 355 360 365

Phe Asn Asp Glu Asp Ile Glu Lys Met Glu Gly Lys Lys Leu Gln Leu  
 370 375 380

Gly Ile Glu Glu Asp Leu Glu Pro Ser Lys Ser Gln Thr Arg Lys Pro  
 385 390 395 400

Lys Cys Gly Lys Gly Thr His Cys Ser Arg Asn Ala Tyr Met Leu Val  
 405 410 415

Tyr Arg Leu Gln Thr Gln Glu Lys Pro Asn Thr Thr Val Gln Val Pro  
 420 425 430

Ala Phe Leu Gln Glu Leu Val Asp Arg Asp Asn Ser Lys Phe Glu Glu  
 435 440 445

Trp Cys Ile Glu Met Ala Glu Met Arg Lys Gln Ser Val Asp Lys Gly  
 450 455 460

Lys Ala Lys His Glu Glu Val Lys Glu Leu Tyr Gln Arg Leu Pro Ala  
 465 470 475 480

Gly Ala Glu Pro Tyr Glu Phe Val Ser Leu Glu Trp Leu Gln Lys Trp  
 485 490 495

Leu Asp Glu Ser Thr Pro Thr Lys Pro Ile Asp Asn His Ala Cys Leu  
 500 505 510

Cys Ser His Asp Lys Leu His Pro Asp Lys Ile Ser Ile Met Lys Arg  
 515 520 525

Ile Ser Glu Tyr Ala Ala Asp Ile Phe Tyr Ser Arg Tyr Gly Gly  
 530 535 540

Pro Arg Leu Thr Val Lys Ala Leu Cys Lys Glu Cys Val Val Glu Arg  
 545 550 555 560

Cys Arg Ile Leu Arg Leu Lys Asn Gln Leu Asn Glu Asp Tyr Lys Thr  
 565 570 575

Val Asn Asn Leu Leu Lys Ala Ala Val Lys Gly Asp Gly Phe Trp Val  
 580 585 590

Gly Lys Ser Ser Leu Arg Ser Trp Arg Gln Leu Ala Leu Glu Gln Leu  
 595 600 605

Asp Glu Gln Asp Gly Asp Ala Glu Gln Ser Asn Gly Lys Met Asn Gly  
 610 615 620

Ser Thr Leu Asn Lys Asp Glu Ser Lys Glu Glu Arg Lys Glu Glu Glu  
 625 630 635 640

Glu Leu Asn Phe Asn Glu Asp Ile Leu Cys Pro His Gly Glu Leu Cys  
 645 650 655

Ile Ser Glu Asn Glu Arg Arg Leu Val Ser Lys Glu Ala Trp Ser Lys  
 660 665 670

Leu Gln Gln Tyr Phe Pro Lys Ala Pro Glu Phe Pro Ser Tyr Lys Glu  
 675 680 685

Cys Cys Ser Gln Cys Lys Ile Leu Glu Arg Glu Gly Glu Glu Asn Glu  
 690 695 700

Ala Leu His Lys Met Ile Ala Asn Glu Gln Lys Thr Ser Leu Pro Asn  
 705 710 715 720

Leu Phe Gln Asp Lys Asn Arg Pro Cys Leu Ser Asn Trp Pro Glu Asp  
 725 730 735

Thr Asp Val Leu Tyr Ile Val Ser Gln Phe Phe Val Glu Glu Trp Arg  
 740 745- 750

Lys Phe Val Arg Lys Pro Thr Arg Cys Ser Pro Val Ser Ser Val Gly  
 755 760 765

Asn Ser Ala Leu Leu Cys Pro His Gly Gly Leu Met Phe Thr Phe Ala  
 770 775 780

Ser Met Thr Lys Glu Asp Ser Lys Leu Ile Ala Leu Ile Trp Pro Ser  
 785 790 795 800

Glu Trp Gln Met Ile Gln Lys Leu Phe Val Val Asp His Val Ile Lys  
 805 810 815

Ile Thr Arg Ile Glu Val Gly Asp Val Asn Pro Ser Glu Thr Gln Tyr  
 820 825 830

Ile Ser Glu Pro Lys Leu Cys Pro Glu Cys Arg Glu Gly Leu Leu Cys  
 835 840 845

Gln Gln Gln Arg Asp Leu Arg Glu Tyr Thr Gln Ala Thr Ile Tyr Val  
 850 855 860

His Lys Val Val Asp Asn Lys Lys Val Met Lys Asp Ser Ala Pro Glu  
 865 870 875 880

Leu Asn Val Ser Ser Ser Glu Thr Glu Glu Asp Lys Glu Glu Ala Lys  
 885 890 895

Pro Asp Gly Glu Lys Asp Pro Asp Phe Asn Gln Ser Asn Gly Gly Thr  
 900 905 910

Lys Arg Gln Lys Ile Ser His Gln Asn Tyr Ile Ala Tyr Gln Lys Gln  
 915 920 925

Val Ile Arg Arg Ser Met Arg His Arg Lys Val Arg Gly Glu Lys Ala  
 930 935 940  
 Leu Leu Val Ser Ala Asn Gln Thr Leu Lys Glu Leu Lys Ile Gln Ile  
 945 950 955 960  
 Met His Ala Phe Ser Val Ala Pro Phe Asp Gln Asn Leu Ser Ile Asp  
 965 970 975  
 Gly Lys Ile Leu Ser Asp Asp Cys Ala Thr Leu Gly Thr Leu Gly Val  
 980 985 990  
 Ile Pro Glu Ser Val Ile Leu Leu Lys Ala Asp Glu Pro Ile Ala Asp  
 995 1000 1005  
 Tyr Ala Ala Met Asp Asp Val Met Gln Val Cys Met Pro Glu Glu Gly  
 1010 1015 1020  
 Phe Lys Gly Thr Gly Leu Leu Gly His  
 1025 1030

<210> 76  
 <211> 517  
 <212> PRT  
 <213> Homo sapiens

<400> 76  
 Met Leu Ser Ser Arg Ala Glu Ala Ala Met Thr Ala Ala Asp Arg Ala  
 1 5 10 15  
 Ile Gln Arg Phe Leu Arg Thr Gly Ala Ala Val Arg Tyr Lys Val Met  
 20 25 30  
 Lys Asn Trp Gly Val Ile Gly Gly Ile Ala Ala Leu Ala Ala Gly  
 35 40 45  
 Ile Tyr Val Ile Trp Gly Pro Ile Thr Glu Arg Lys Lys Arg Arg Lys  
 50 55 60  
 Gly Leu Val Pro Gly Leu Val Asn Leu Gly Asn Thr Cys Phe Met Asn  
 65 70 75 80  
 Ser Leu Leu Gln Gly Leu Ser Ala Cys Pro Ala Phe Ile Arg Trp Leu  
 85 90 95  
 Glu Glu Phe Thr Ser Gln Tyr Ser Arg Asp Gln Lys Glu Pro Pro Ser  
 100 105 110  
 His Gln Tyr Leu Ser Leu Thr Leu Leu His Leu Leu Lys Ala Leu Ser  
 115 120 125  
 Cys Gln Glu Val Thr Asp Asp Glu Val Leu Asp Ala Ser Cys Leu Leu  
 130 135 140  
 Asp Val Leu Arg Met Tyr Arg Trp Gln Ile Ser Ser Phe Glu Glu Gln  
 145 150 155 160

Asp Ala His Glu Leu Phe His Val Ile Thr Ser Ser Leu Glu Asp Glu  
 165 170 175

Arg Asp Arg Gln Pro Arg Val Thr His Leu Phe Asp Val His Ser Leu  
 180 185 190

Glu Gln Gln Ser Glu Ile Thr Pro Lys Gln Ile Thr Cys Arg Thr Arg  
 195 200 205

Gly Ser Pro His Pro Thr Ser Asn His Trp Lys Ser Gln His Pro Phe  
 210 215 220

His Gly Arg Leu Thr Ser Asn Met Val Cys Lys His Cys Glu His Gln  
 225 230 235 240

Ser Pro Val Arg Phe Asp Thr Phe Asp Ser Leu Ser Leu Ser Ile Pro  
 245 250 255

Ala Ala Thr Trp Gly His Pro Leu Thr Leu Asp His Cys Leu His His  
 260 265 270

Phe Ile Ser Ser Glu Ser Val Arg Asp Val Val Cys Asp Asn Cys Thr  
 275 280 285

Lys Ile Glu Ala Lys Gly Thr Leu Asn Gly Glu Lys Val Glu His Gln  
 290 295 300

Arg Thr Thr Phe Val Lys Gln Leu Lys Leu Gly Lys Leu Pro Gln Cys  
 305 310 315 320

Leu Cys Ile His Leu Gln Arg Leu Ser Trp Ser Ser His Gly Thr Pro  
 325 330 335

Leu Lys Arg His Glu His Val Gln Phe Asn Glu Phe Leu Met Met Asp  
 340 345 350

Ile Tyr Lys Tyr His Leu Leu Gly His Lys Pro Ser Gln His Asn Pro  
 355 360 365

Lys Leu Asn Lys Asn Pro Gly Pro Thr Leu Glu Leu Gln Asp Gly Pro  
 370 375 380

Gly Ala Pro Thr Pro Val Leu Asn Gln Pro Gly Ala Pro Lys Thr Gln  
 385 390 395 400

Ile Phe Met Asn Gly Ala Cys Ser Pro Ser Leu Leu Pro Thr Leu Ser  
 405 410 415

Ala Pro Met Pro Phe Pro Leu Pro Val Val Pro Asp Tyr Ser Ser Ser  
 420 425 430

Thr Tyr Leu Phe Arg Leu Met Ala Val Val Val His His Gly Asp Met  
 435 440 445

His Ser Gly His Phe Val Thr Tyr Arg Arg Ser Pro Pro Ser Ala Arg  
 450 455 460

Asn	Pro	Leu	Ser	Thr	Ser	Asn	Gln	Trp	Leu	Trp	Val	Ser	Asp	Asp	Thr
465															480
Val	Arg	Lys	Ala	Ser	Leu	Gln	Glu	Val	Leu	Ser	Ser	Ser	Ala	Tyr	Leu
					485				490						495
Leu	Phe	Tyr	Glu	Arg	Val	Leu	Ser	Arg	Met	Gln	His	Gln	Ser	Gln	Glu
						500			505						510
Cys	Lys	Ser	Glu	Glu											
					515										

<210> 77

<211> 1123

<212> PRT

<213> Homo sapiens

<400> 77

Met	Asp	Leu	Gly	Pro	Gly	Asp	Ala	Ala	Gly	Gly	Gly	Pro	Leu	Ala	Pro
1									10						15

Arg	Pro	Arg	Arg	Arg	Arg	Ser	Leu	Arg	Arg	Leu	Phe	Ser	Arg	Phe	Leu
						20			25				30		

Leu	Ala	Leu	Gly	Ser	Arg	Ser	Arg	Pro	Gly	Asp	Ser	Pro	Pro	Arg	Pro
						35			40				45		

Gln	Pro	Gly	His	Cys	Asp	Gly	Asp	Gly	Glu	Gly	Gly	Phe	Ala	Cys	Ala
						50			55				60		

Pro	Gly	Pro	Val	Pro	Ala	Ala	Pro	Gly	Ser	Pro	Gly	Glu	Glu	Arg	Pro
							65			70				75	

Pro	Gly	Pro	Gln	Pro	Gln	Leu	Gln	Leu	Pro	Ala	Gly	Asp	Gly	Ala	Arg
							85			90				95	

Pro	Pro	Gly	Ala	Gln	Gly	Leu	Lys	Asn	His	Gly	Asn	Thr	Cys	Phe	Met
							100			105			110		

Asn	Ala	Val	Val	Gln	Cys	Leu	Ser	Asn	Thr	Asp	Leu	Leu	Ala	Glu	Phe
							115			120			125		

Leu	Ala	Leu	Gly	Arg	Tyr	Arg	Ala	Ala	Pro	Gly	Arg	Ala	Glu	Val	Thr
						130			135			140			

Glu	Gln	Leu	Ala	Ala	Leu	Val	Arg	Ala	Leu	Trp	Thr	Arg	Glu	Tyr	Thr
						145			150			155			160

Pro	Gln	Leu	Ser	Ala	Glu	Phe	Lys	Asn	Ala	Val	Ser	Lys	Tyr	Gly	Ser
							165			170			175		

Gln	Phe	Gln	Gly	Asn	Ser	Gln	His	Asp	Ala	Leu	Glu	Phe	Leu	Leu	Trp
							180			185			190		

Leu	Leu	Asp	Arg	Val	His	Glu	Asp	Leu	Glu	Gly	Ser	Ser	Arg	Gly	Pro
						195			200			205			

Val Ser Glu Lys Leu Pro Pro Glu Ala Thr Lys Thr Ser Glu Asn Cys  
 210 215 220  
 Leu Ser Pro Ser Ala Gln Leu Pro Leu Gly Gln Ser Phe Val Gln Ser  
 225 230 235 240  
 His Phe Gln Ala Gln Tyr Arg Ser Ser Leu Thr Cys Pro His Cys Leu  
 245 250 255  
 Lys Gln Ser Asn Thr Phe Asp Pro Phe Leu Cys Val Ser Leu Pro Ile  
 260 265 270  
 Pro Leu Arg Gln Thr Arg Phe Leu Ser Val Thr Leu Val Phe Pro Ser  
 275 280 285  
 Lys Ser Gln Arg Phe Leu Arg Val Gly Leu Ala Val Pro Ile Leu Ser  
 290 295 300  
 Thr Val Ala Ala Leu Arg Lys Met Val Ala Glu Glu Gly Gly Val Pro  
 305 310 315 320  
 Ala Asp Glu Val Ile Leu Val Glu Leu Tyr Pro Ser Gly Phe Gln Arg  
 325 330 335  
 Ser Phe Phe Asp Glu Glu Asp Leu Asn Thr Ile Ala Glu Gly Asp Asn  
 340 345 350  
 Val Tyr Ala Phe Gln Val Pro Pro Ser Pro Ser Gln Gly Thr Leu Ser  
 355 360 365  
 Ala His Pro Leu Gly Leu Ser Ala Ser Pro Arg Leu Ala Ala Arg Glu  
 370 375 380  
 Gly Gln Arg Phe Ser Leu Ser Leu His Ser Glu Ser Lys Val Leu Ile  
 385 390 395 400  
 Leu Phe Cys Asn Leu Val Gly Ser Gly Gln Gln Ala Ser Arg Phe Gly  
 405 410 415  
 Pro Pro Phe Leu Ile Arg Glu Asp Arg Ala Val Ser Trp Ala Gln Leu  
 420 425 430  
 Gln Gln Ser Ile Leu Ser Lys Val Arg His Leu Met Lys Ser Glu Ala  
 435 440 445  
 Pro Val Gln Asn Leu Gly Ser Leu Phe Ser Ile Arg Val Val Gly Leu  
 450 455 460  
 Ser Val Ala Cys Ser Tyr Leu Ser Pro Lys Asp Ser Arg Pro Leu Cys  
 465 470 475 480  
 His Trp Ala Val Asp Arg Val Leu His Leu Arg Arg Pro Gly Gly Pro  
 485 490 495  
 Pro His Val Lys Leu Ala Val Glu Trp Asp Ser Ser Val Lys Glu Arg  
 500 505 510

Leu Phe Gly Ser Leu Gln Glu Glu Arg Ala Gln Asp Ala Asp Ser Val  
 515 520 525

Trp Gln Gln Gln Gln Ala His Gln Gln His Ser Cys Thr Leu Asp Glu  
 530 535 540

Cys Phe Gln Phe Tyr Thr Lys Glu Glu Gln Leu Ala Gln Asp Asp Ala  
 545 550 555 560

Trp Lys Cys Pro His Cys Gln Val Leu Gln Gln Gly Met Val Lys Leu  
 565 570 575

Ser Leu Trp Thr Leu Pro Asp Ile Leu Ile Ile His Leu Lys Arg Phe  
 580 585 590

Cys Gln Val Gly Glu Arg Arg Asn Lys Leu Ser Thr Leu Val Lys Phe  
 595 600 605

Pro Leu Ser Gly Leu Asn Met Ala Pro His Val Ala Gln Arg Ser Thr  
 610 615 620

Ser Pro Glu Ala Gly Leu Gly Pro Trp Pro Ser Trp Lys Gln Pro Asp  
 625 630 635 640

Cys Leu Pro Thr Ser Tyr Pro Leu Asp Phe Leu Tyr Asp Leu Tyr Ala  
 645 650 655

Val Cys Asn His His Gly Asn Leu Gln Gly Gly His Tyr Thr Ala Tyr  
 660 665 670

Cys Arg Asn Ser Leu Asp Gly Gln Trp Tyr Ser Tyr Asp Asp Ser Thr  
 675 680 685

Val Glu Pro Leu Arg Glu Asp Glu Val Asn Thr Arg Gly Ala Tyr Ile  
 690 695 700

Leu Phe Tyr Gln Lys Arg Asn Ser Ile Pro Pro Trp Ser Ala Ser Ser  
 705 710 715 720

Ser Met Arg Gly Ser Thr Ser Ser Leu Ser Asp His Trp Leu Leu  
 725 730 735

Arg Leu Gly Ser His Ala Gly Ser Thr Arg Gly Ser Leu Leu Ser Trp  
 740 745 750

Ser Ser Ala Pro Cys Pro Ser Leu Pro Gln Val Pro Asp Ser Pro Ile  
 755 760 765

Phe Thr Asn Ser Leu Cys Asn Gln Glu Lys Gly Gly Leu Glu Pro Arg  
 770 775 780

Arg Leu Val Arg Gly Val Lys Gly Arg Ser Ile Ser Met Lys Ala Pro  
 785 790 795 800

Thr Thr Ser Arg Ala Lys Gln Gly Pro Phe Lys Thr Met Pro Leu Arg  
 805 810 815

Trp Ser Phe Gly Ser Lys Glu Lys Pro Pro Gly Ala Ser Val Glu Leu  
 820 825 830

Val Glu Tyr Leu Glu Ser Arg Arg Arg Pro Arg Ser Thr Ser Gln Ser  
 835 840 845

Ile Val Ser Leu Leu Thr Gly Thr Ala Gly Glu Asp Glu Lys Ser Ala  
 850 855 860

Ser Pro Arg Ser Asn Val Ala Leu Pro Ala Asn Ser Glu Asp Gly Gly  
 865 870 875 880

Arg Ala Ile Glu Arg Gly Pro Ala Gly Val Pro Cys Pro Ser Ala Gln  
 885 890 895

Pro Asn His Cys Leu Ala Pro Gly Asn Ser Asp Gly Pro Asn Thr Ala  
 900 905 910

Arg Lys Leu Lys Glu Asn Ala Gly Gln Asp Ile Lys Leu Pro Arg Lys  
 915 920 925

Phe Asp Leu Pro Leu Thr Val Met Pro Ser Val Glu His Glu Lys Pro  
 930 935 940

Ala Arg Pro Glu Gly Gln Lys Ala Met Asn Trp Lys Glu Ser Phe Gln  
 945 950 955 960

Met Gly Ser Lys Ser Ser Pro Pro Ser Pro Tyr Met Gly Phe Ser Gly  
 965 970 975

Asn Ser Lys Asp Ser Arg Arg Gly Thr Ser Glu Leu Asp Arg Pro Leu  
 980 985 990

Gln Gly Thr Leu Thr Leu Leu Arg Ser Val Phe Arg Lys Lys Glu Asn  
 995 1000 1005

Arg Arg Asn Glu Arg Ala Glu Val Ser Pro Gln Val Pro Pro Val Ser  
 1010 1015 1020

Leu Val Ser Gly Gly Leu Ser Pro Ala Met Asp Gly Gln Ala Pro Gly  
 1025 1030 1035 1040

Ser Pro Pro Ala Leu Arg Ile Pro Glu Gly Leu Ala Arg Gly Leu Gly  
 1045 1050 1055

Ser Arg Leu Glu Arg Asp Val Trp Ser Ala Pro Ser Ser Leu Arg Leu  
 1060 1065 1070

Pro Arg Lys Ala Ser Arg Ala Pro Arg Gly Ser Ala Leu Gly Met Ser  
 1075 1080 1085

Gln Arg Thr Val Pro Gly Glu Gln Ala Ser Tyr Gly Thr Phe Gln Arg  
 1090 1095 1100

Val Lys Tyr His Thr Leu Ser Leu Gly Arg Lys Lys Thr Leu Pro Glu  
 1105 1110 1115 1120

Ser Ser Phe

&lt;210&gt; 78

&lt;211&gt; 261

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 78

Met	Gln	Leu	Val	Ile	Leu	Arg	Val	Thr	Ile	Phe	Leu	Pro	Trp	Cys	Phe
1				5					10					15	

Ala	Val	Pro	Val	Pro	Pro	Ala	Ala	Asp	His	Lys	Gly	Trp	Asp	Phe	Val
				20				25				30			

Glu	Gly	Tyr	Phe	His	Gln	Phe	Phe	Leu	Thr	Lys	Lys	Glu	Ser	Pro	Leu
				35				40				45			

Leu	Thr	Gln	Glu	Thr	Gln	Thr	Gln	Leu	Leu	Gln	Gln	Phe	His	Arg	Asn
				50				55				60			

Gly	Thr	Asp	Leu	Leu	Asp	Met	Gln	Met	His	Ala	Leu	Leu	His	Gln	Pro
				65				70				75			80

His	Cys	Gly	Val	Pro	Asp	Gly	Ser	Asp	Thr	Ser	Ile	Ser	Pro	Gly	Arg
				85				90					95		

Cys	Lys	Trp	Asn	Lys	His	Thr	Leu	Thr	Tyr	Arg	Ile	Ile	Asn	Tyr	Pro
				100				105					110		

His	Asp	Met	Lys	Pro	Ser	Ala	Val	Lys	Asp	Ser	Ile	Tyr	Asn	Ala	Val
				115				120				125			

Ser	Ile	Trp	Ser	Asn	Val	Thr	Pro	Leu	Ile	Phe	Gln	Gln	Val	Gln	Asn
				130				135				140			

Gly	Asp	Ala	Asp	Ile	Lys	Val	Ser	Phe	Trp	Gln	Trp	Ala	His	Glu	Asp
				145				150			155		160		

Gly	Trp	Pro	Phe	Asp	Gly	Pro	Gly	Gly	Ile	Leu	Gly	His	Ala	Phe	Leu
				165				170				175			

Pro	Asn	Ser	Gly	Asn	Pro	Gly	Val	Val	His	Phe	Asp	Lys	Asn	Glu	His
				180				185				190			

Trp	Ser	Ala	Ser	Asp	Thr	Gly	Tyr	Asn	Leu	Phe	Leu	Val	Ala	Thr	His
				195				200				205			

Glu	Ile	Gly	His	Ser	Leu	Gly	Leu	Gln	His	Ser	Gly	Asn	Gln	Ser	Ser
				210				215				220			

Ile	Met	Tyr	Pro	Thr	Tyr	Trp	Tyr	His	Asp	Pro	Arg	Thr	Phe	Gln	Leu
				225				230				235		240	

Ser	Ala	Asp	Asp	Ile	Gln	Arg	Ile	Gln	His	Leu	Tyr	Gly	Glu	Lys	Cys
				245				250				255			

Ser Ser Asp Ile Pro  
260

<210> 79  
<211> 483  
<212> PRT  
<213> Homo sapiens

<400> 79  
Met Lys Val Leu Pro Ala Ser Gly Leu Ala Val Phe Leu Ile Met Ala  
1 5 10 15

Leu Lys Phe Ser Thr Ala Ala Pro Ser Leu Val Ala Ala Ser Pro Arg  
20 25 30

Thr Trp Arg Asn Asn Tyr Arg Leu Ala Gln Ala Tyr Leu Asp Lys Tyr  
35 40 45

Tyr Thr Asn Lys Glu Gly His Gln Ile Gly Glu Met Val Ala Arg Gly  
50 55 60

Ser Asn Ser Met Ile Arg Lys Ile Lys Glu Leu Gln Ala Phe Phe Gly  
65 70 75 80

Leu Gln Val Thr Gly Lys Leu Asp Gln Thr Thr Met Asn Val Ile Lys  
85 90 95

Lys Pro Arg Cys Gly Val Pro Asp Val Ala Asn Tyr Arg Leu Phe Pro  
100 105 110

Gly Glu Pro Lys Trp Lys Lys Asn Thr Leu Thr Tyr Arg Ile Ser Lys  
115 120 125

Tyr Thr Pro Ser Met Ser Ser Val Glu Val Asp Lys Ala Val Glu Met  
130 135 140

Ala Leu Gln Ala Trp Ser Ser Ala Val Pro Leu Ser Phe Val Arg Ile  
145 150 155 160

Asn Ser Gly Glu Ala Asp Ile Met Ile Ser Phe Glu Asn Gly Asp His  
165 170 175

Gly Asp Ser Tyr Pro Phe Asp Gly Pro Arg Gly Thr Leu Ala His Ala  
180 185 190

Phe Ala Pro Gly Glu Gly Leu Gly Gly Asp Thr His Phe Asp Asn Pro  
195 200 205

Glu Lys Trp Thr Met Gly Thr Asn Gly Phe Asn Leu Phe Thr Val Ala  
210 215 220

Ala His Glu Phe Gly His Ala Leu Gly Leu Ala His Ser Thr Asp Pro  
225 230 235 240

Ser Ala Leu Met Tyr Pro Thr Tyr Lys Tyr Lys Asn Pro Tyr Gly Phe  
245 250 255

His Leu Pro Lys Asp Asp Val Lys Gly Ile Gln Ala Leu Tyr Gly Pro  
 260 265 270  
 Arg Lys Val Phe Leu Gly Lys Pro Thr Leu Pro His Ala Pro His His  
 275 280 285  
 Lys Pro Ser Ile Pro Asp Leu Cys Asp Ser Ser Ser Ser Phe Asp Ala  
 290 295 300  
 Val Thr Met Leu Gly Lys Glu Leu Leu Leu Phe Lys Asp Arg Ile Phe  
 305 310 315 320  
 Trp Arg Arg Gln Val His Leu Arg Thr Gly Ile Arg Pro Ser Thr Ile  
 325 330 335  
 Thr Ser Ser Phe Pro Gln Leu Met Ser Asn Val Asp Ala Ala Tyr Glu  
 340 345 350  
 Val Ala Glu Arg Gly Thr Ala Tyr Phe Phe Lys Gly Pro His Tyr Trp  
 355 360 365  
 Ile Thr Arg Gly Phe Gln Met Gln Gly Pro Pro Arg Thr Ile Tyr Asp  
 370 375 380  
 Phe Gly Phe Pro Arg His Val Gln Gln Ile Asp Ala Ala Val Tyr Leu  
 385 390 395 400  
 Arg Glu Pro Gln Lys Thr Leu Phe Phe Val Gly Asp Glu Tyr Tyr Ser  
 405 410 415  
 Tyr Asp Glu Arg Lys Arg Lys Met Glu Lys Asp Tyr Pro Lys Asn Thr  
 420 425 430  
 Glu Glu Glu Phe Ser Gly Val Asn Gly Gln Ile Asp Ala Ala Val Glu  
 435 440 445  
 Leu Asn Gly Tyr Ile Tyr Phe Phe Ser Gly Pro Lys Thr Tyr Lys Tyr  
 450 455 460  
 Asp Thr Glu Lys Glu Asp Val Val Ser Val Val Lys Ser Ser Ser Trp  
 465 470 475 480  
 Ile Gly Cys

<210> 80  
 <211> 765  
 <212> PRT  
 <213> Homo sapiens

<400> 80  
 Met Asn Val Ala Leu Gln Glu Leu Gly Ala Gly Ser Asn Met Val Glu  
 1 5 10 15  
 Tyr Lys Arg Ala Thr Leu Arg Asp Glu Asp Ala Pro Glu Thr Pro Val  
 20 25 30

Glu Gly Gly Ala Ser Pro Asp Ala Met Glu Val Gly Phe Gln Lys Gly  
 35 40 45

Thr Arg Gln Leu Leu Gly Ser Arg Thr Gln Leu Glu Leu Val Leu Ala  
 50 55 60

Gly Ala Ser Leu Leu Leu Ala Ala Leu Leu Leu Gly Cys Leu Val Ala  
 65 70 75 80

Leu Gly Val Gln Tyr His Arg Asp Pro Ser His Ser Thr Cys Leu Thr  
 85 90 95

Glu Ala Cys Ile Arg Val Ala Gly Lys Ile Leu Glu Ser Leu Asp Arg  
 100 105 110

Gly Val Ser Pro Cys Glu Asp Phe Tyr Gln Phe Ser Cys Gly Gly Trp  
 115 120 125

Ile Arg Arg Asn Pro Leu Pro Asp Gly Arg Ser Arg Trp Asn Thr Phe  
 130 135 140

Asn Ser Leu Trp Asp Gln Asn Gln Ala Ile Leu Lys His Leu Leu Glu  
 145 150 155 160

Asn Thr Thr Phe Asn Ser Ser Glu Ala Glu Gln Lys Thr Gln Arg  
 165 170 175

Phe Tyr Leu Ser Cys Leu Gln Val Glu Arg Ile Glu Glu Leu Gly Ala  
 180 185 190

Gln Pro Leu Arg Asp Leu Ile Glu Lys Ile Gly Gly Trp Asn Ile Thr  
 195 200 205

Gly Pro Trp Asp Gln Asp Asn Phe Met Glu Val Leu Lys Ala Val Ala  
 210 215 220

Gly Thr Tyr Arg Ala Thr Pro Phe Phe Thr Val Tyr Ile Ser Ala Asp  
 225 230 235 240

Ser Lys Ser Ser Asn Ser Asn Val Ile Gln Val Asp Gln Ser Gly Leu  
 245 250 255

Phe Leu Pro Ser Arg Asp Tyr Tyr Leu Asn Arg Thr Ala Asn Glu Lys  
 260 265 270

Val Leu Thr Ala Tyr Leu Asp Tyr Met Glu Glu Leu Gly Met Leu Leu  
 275 280 285

Gly Gly Arg Pro Thr Ser Thr Arg Glu Gln Met Gln Gln Val Leu Glu  
 290 295 300

Leu Glu Ile Gln Leu Ala Asn Ile Thr Val Pro Gln Asp Gln Arg Arg  
 305 310 315 320

Asp Glu Glu Lys Ile Tyr His Lys Met Ser Ile Ser Glu Leu Gln Ala  
 325 330 335

Leu Ala Pro Ser Met Asp Trp Leu Glu Phe Leu Ser Phe Leu Leu Ser  
 340 345 350

Pro Leu Glu Leu Ser Asp Ser Glu Pro Val Val Val Tyr Gly Met Asp  
 355 360 365

Tyr Leu Gln Gln Val Ser Glu Leu Ile Asn Arg Thr Glu Pro Ser Ile  
 370 375 380

Leu Asn Asn Tyr Leu Ile Trp Asn Leu Val Gln Lys Thr Thr Ser Ser  
 385 390 395 400

Leu Asp Arg Arg Phe Glu Ser Ala Gln Glu Lys Leu Leu Glu Thr Leu  
 405 410 415

Tyr Gly Thr Lys Lys Ser Cys Val Pro Arg Trp Gln Thr Cys Ile Ser  
 420 425 430

Asn Thr Asp Asp Ala Leu Gly Phe Ala Leu Gly Ser Leu Phe Val Lys  
 435 440 445

Ala Thr Phe Asp Arg Gln Ser Lys Glu Ile Ala Glu Gly Met Ile Ser  
 450 455 460

Glu Ile Arg Thr Ala Phe Glu Glu Ala Leu Gly Gln Leu Val Trp Met  
 465 470 475 480

Asp Glu Lys Thr Arg Gln Ala Ala Lys Glu Lys Ala Asp Ala Ile Tyr  
 485 490 495

Asp Met Ile Gly Phe Pro Asp Phe Ile Leu Glu Pro Lys Glu Leu Asp  
 500 505 510

Asp Val Tyr Asp Gly Tyr Glu Ile Ser Glu Asp Ser Phe Phe Gln Asn  
 515 520 525

Met Leu Asn Leu Tyr Asn Phe Ser Ala Lys Val Met Ala Asp Gln Leu  
 530 535 540

Arg Lys Pro Pro Ser Arg Asp Gln Trp Ser Met Thr Pro Gln Thr Val  
 545 550 555 560

Asn Ala Tyr Tyr Leu Pro Thr Lys Asn Glu Ile Val Phe Pro Ala Gly  
 565 570 575

Ile Leu Gln Ala Pro Phe Tyr Ala Arg Asn His Pro Lys Ala Leu Asn  
 580 585 590

Phe Gly Gly Ile Gly Val Val Met Gly His Glu Leu Thr His Ala Phe  
 595 600 605

Asp Asp Gln Gly Arg Glu Tyr Asp Lys Glu Gly Asn Leu Arg Pro Trp  
 610 615 620

Trp Gln Asn Glu Ser Leu Ala Ala Phe Arg Asn His Thr Ala Cys Met  
 625 630 635 640

Glu Glu Gln Tyr Asn Gln Tyr Gln Val Asn Gly Glu Arg Leu Asn Gly  
 645 650 655

Arg Gln Thr Leu Gly Glu Asn Ile Ala Asp Asn Gly Gly Leu Lys Ala  
 660 665 670

Ala Tyr Asn Ala Tyr Lys Ala Trp Leu Arg Lys His Gly Glu Glu Gln  
 675 680 685

Gln Leu Pro Ala Val Gly Leu Thr Asn His Gln Leu Phe Phe Val Gly  
 690 695 700

Phe Ala Gln Val Trp Cys Ser Val Arg Thr Pro Glu Ser Ser His Glu  
 705 710 715 720

Gly Leu Val Thr Asp Pro His Ser Pro Ala Arg Phe Arg Val Leu Gly  
 725 730 735

Thr Leu Ser Asn Ser Arg Asp Phe Leu Arg His Phe Gly Cys Pro Val  
 740 745 750

Gly Ser Pro Met Asn Pro Gly Gln Leu Cys Glu Val Trp  
 755 760 765

<210> 81

<211> 419

<212> PRT

<213> Homo sapiens

<400> 81

Met Pro Glu Lys Arg Pro Phe Glu Arg Leu Pro Ala Asp Val Ser Pro  
 1 5 10 15

Ile Asn Cys Ser Leu Cys Leu Lys Pro Asp Leu Leu Asp Phe Thr Phe  
 20 25 30

Glu Gly Lys Leu Glu Ala Ala Gln Val Arg Gln Ala Thr Asn Gln  
 35 40 45

Ile Val Met Asn Cys Ala Asp Ile Asp Ile Ile Thr Ala Ser Tyr Ala  
 50 55 60

Pro Glu Gly Asp Glu Glu Ile His Ala Thr Gly Phe Asn Tyr Gln Asn  
 65 70 75 80

Glu Asp Glu Lys Val Thr Leu Ser Phe Pro Ser Thr Leu Gln Thr Gly  
 85 90 95

Thr Gly Thr Leu Lys Ile Asp Phe Val Gly Glu Leu Asn Asp Lys Met  
 100 105 110

Lys Gly Phe Tyr Arg Ser Lys Tyr Thr Thr Pro Ser Gly Glu Val Arg  
 115 120 125

Tyr Ala Ala Val Thr Gln Phe Glu Ala Thr Asp Ala Arg Arg Ala Phe  
 130 135 140

Pro Cys Trp Asp Glu Arg Ala Ile Lys Ala Thr Phe Asp Ile Ser Leu  
 145 150 155 160

Val Val Pro Lys Asp Arg Val Ala Leu Ser Asn Met Asn Val Ile Asp  
 165 170 175

Arg Lys Pro Tyr Pro Asp Asp Glu Asn Leu Val Glu Val Lys Phe Ala  
 180 185 190

Arg Thr Pro Val Thr Ser Thr Tyr Leu Val Ala Phe Val Val Gly Glu  
 195 200 205

Tyr Asp Phe Val Glu Thr Arg Ser Lys Asp Gly Val Cys Val Cys Val  
 210 215 220

Tyr Thr Pro Val Gly Lys Ala Glu Gln Gly Lys Phe Ala Leu Glu Val  
 225 230 235 240

Ala Ala Lys Thr Leu Pro Phe Tyr Asn Asp Tyr Phe Asn Val Pro Tyr  
 245 250 255

Pro Leu Pro Lys Ile Asp Leu Ile Ala Ile Ala Asp Phe Ala Ala Gly  
 260 265 270

Ala Met Glu Asn Trp Asp Leu Val Thr Tyr Arg Glu Thr Ala Leu Leu  
 275 280 285

Ile Asp Pro Lys Asn Ser Cys Ser Ser Arg Gln Trp Val Ala Leu  
 290 295 300

Val Val Gly His Glu Leu Ala His Gln Trp Phe Gly Asn Leu Val Thr  
 305 310 315 320

Met Glu Trp Trp Thr His Leu Trp Leu Asn Glu Gly Phe Ala Ser Trp  
 325 330 335

Ile Glu Tyr Leu Cys Val Asp His Cys Phe Pro Glu Tyr Asp Ile Trp  
 340 345 350

Thr Gln Phe Val Ser Ala Asp Tyr Thr Arg Ala Gln Glu Leu Asp Ala  
 355 360 365

Leu Asp Asn Ser His Pro Ile Glu Val Ser Val Gly His Pro Ser Glu  
 370 375 380

Val Asp Glu Ile Phe Asp Ala Ile Ser Tyr Ser Lys Gly Ala Ser Val  
 385 390 395 400

Ile Arg Met Leu His Asp Tyr Ile Gly Asp Lys Val Lys Lys Lys Thr  
 405 410 415

Leu Ser Ile

<210> 82  
 <211> 755  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 82

Met	Arg	Pro	Ala	Pro	Ile	Ala	Leu	Trp	Leu	Arg	Leu	Val	Leu	Ala	Leu
1					5				10						15
Ala Leu Val Arg Pro Arg Ala Val Gly Trp Ala Pro Val Arg Ala Pro															
20 25 30															
Ile Tyr Val Ser Ser Trp Ala Val Gln Val Ser Gln Gly Asn Arg Glu															
35 40 45															
Val Glu Arg Leu Ala Arg Lys Phe Gly Phe Val Asn Leu Gly Pro Ile															
50 55 60															
Phe Pro Asp Gly Gln Tyr Phe His Leu Arg His Arg Gly Val Val Gln															
65 70 75 80															
Gln Ser Leu Thr Pro His Trp Gly His His Leu His Leu Lys Lys Asn															
85 90 95															
Pro Lys Val Gln Trp Phe Gln Gln Thr Leu Gln Arg Arg Val Lys															
100 105 110															
Arg Ser Val Val Val Pro Thr Asp Pro Trp Phe Ser Lys Gln Trp Tyr															
115 120 125															
Met Asn Ser Glu Ala Gln Pro Asp Leu Ser Ile Leu Gln Ala Trp Ser															
130 135 140															
Gln Gly Leu Ser Gly Gln Gly Ile Val Val Ser Val Leu Asp Asp Gly															
145 150 155 160															
Ile Glu Lys Asp His Pro Asp Leu Trp Ala Asn Tyr Asp Pro Leu Ala															
165 170 175															
Ser Tyr Asp Phe Asn Asp Tyr Asp Pro Asp Pro Gln Pro Arg Tyr Thr															
180 185 190															
Pro Ser Lys Glu Asn Arg His Gly Thr Arg Cys Ala Gly Glu Val Ala															
195 200 205															
Ala Met Ala Asn Asn Gly Phe Cys Gly Val Gly Val Ala Phe Asn Ala															
210 215 220															
Arg Ile Gly Gly Val Arg Met Leu Asp Gly Thr Ile Thr Asp Val Ile															
225 230 235 240															
Glu Ala Gln Ser Leu Ser Leu Gln Pro Gln His Ile His Ile Tyr Ser															
245 250 255															
Ala Ser Trp Gly Pro Glu Asp Asp Gly Arg Thr Val Asp Gly Pro Gly															
260 265 270															
Ile Leu Thr Arg Glu Ala Phe Arg Arg Gly Val Thr Lys Gly Arg Gly															
275 280 285															

Gly Leu Gly Thr Leu Phe Ile Trp Ala Ser Gly Asn Gly Gly Leu His  
 290 295 300  
 Tyr Asp Asn Cys Asn Cys Asp Gly Tyr Thr Asn Ser Ile His Thr Leu  
 305 310 315 320  
 Ser Val Gly Ser Thr Thr Gln Gln Gly Arg Val Pro Trp Tyr Ser Glu  
 325 330 335  
 Ala Cys Ala Ser Thr Leu Thr Thr Tyr Ser Ser Gly Val Ala Thr  
 340 345 350  
 Asp Pro Gln Ile Val Thr Thr Asp Leu His His Gly Cys Thr Asp Gln  
 355 360 365  
 His Thr Gly Thr Ser Ala Ser Ala Pro Leu Ala Ala Gly Met Ile Ala  
 370 375 380  
 Leu Ala Leu Glu Ala Asn Pro Phe Leu Thr Trp Arg Asp Met Gln His  
 385 390 395 400  
 Leu Val Val Arg Ala Ser Lys Pro Ala His Leu Gln Ala Glu Asp Trp  
 405 410 415  
 Arg Thr Asn Gly Val Gly Arg Gln Val Ser His His Tyr Gly Tyr Gly  
 420 425 430  
 Leu Leu Asp Ala Gly Leu Leu Val Asp Thr Ala Arg Thr Trp Leu Pro  
 435 440 445  
 Thr Gln Pro Gln Arg Lys Cys Ala Val Arg Val Gln Ser Arg Pro Thr  
 450 455 460  
 Pro Ile Leu Pro Leu Ile Tyr Ile Arg Glu Asn Val Ser Ala Cys Ala  
 465 470 475 480  
 Gly Leu His Asn Ser Ile Arg Ser Leu Glu His Val Gln Ala Gln Leu  
 485 490 495  
 Thr Leu Ser Tyr Ser Arg Arg Gly Asp Leu Glu Ile Ser Leu Thr Ser  
 500 505 510  
 Pro Met Gly Thr Arg Ser Thr Leu Val Ala Ile Arg Pro Leu Asp Val  
 515 520 525  
 Ser Thr Glu Gly Tyr Asn Asn Trp Val Phe Met Ser Thr His Phe Trp  
 530 535 540  
 Asp Glu Asn Pro Gln Gly Val Trp Thr Leu Gly Leu Glu Asn Lys Gly  
 545 550 555 560  
 Tyr Tyr Phe Asn Thr Gly Thr Leu Tyr Arg Tyr Thr Leu Leu Leu Tyr  
 565 570 575  
 Gly Thr Ala Glu Asp Met Thr Ala Arg Pro Thr Gly Pro Gln Val Thr  
 580 585 590

Ser Ser Ala Cys Val Gln Arg Asp Thr Glu Gly Leu Cys Gln Ala Cys  
 595 600 605

Asp Gly Pro Ala Tyr Ile Leu Gly Gln Leu Cys Leu Ala Tyr Cys Pro  
 610 615 620

Pro Arg Phe Phe Asn His Thr Arg Leu Val Thr Ala Gly Pro Gly His  
 625 630 635 640

Thr Ala Ala Pro Ala Leu Arg Val Cys Ser Ser Cys His Ala Ser Cys  
 645 650 655

Tyr Thr Cys Arg Gly Gly Ser Pro Arg Asp Cys Thr Ser Cys Pro Pro  
 660 665 670

Ser Ser Thr Leu Asp Gln Gln Gly Ser Cys Met Gly Pro Thr Thr  
 675 680 685

Pro Asp Ser Arg Pro Arg Leu Arg Ala Ala Ala Cys Pro His His Arg  
 690 695 700

Cys Pro Ala Ser Ala Met Val Leu Ser Leu Leu Ala Val Thr Leu Gly  
 705 710 715 720

Gly Pro Val Leu Cys Gly Met Ser Met Asp Leu Pro Leu Tyr Ala Trp  
 725 730 735

Leu Ser Arg Ala Arg Ala Thr Pro Thr Lys Pro Gln Val Trp Leu Pro  
 740 745 750

Ala Gly Thr  
 755

<210> 83  
 <211> 391  
 <212> PRT  
 <213> Homo sapiens

<400> 83  
 Gly Pro Gly Arg Gln Gly Gly Cys Ala Gly Arg Arg Ser Thr Ala Leu  
 1 5 10 15

Pro Leu Arg Ala Pro Leu Arg Ala Arg Arg Pro Gly Pro Arg Ser Glu  
 20 25 30

Arg Met Gly Ala Ala Thr Cys Arg Gly Ser Arg Ile Pro Ser Gly Pro  
 35 40 45

Pro Val Gln Gly Glu Arg Ser Ala Pro Arg Phe Gly Val Thr Ser Leu  
 50 55 60

Ser Leu Trp Pro Ala Asp Phe Lys Asp Asn Trp Arg Ile Ala Gly Ser  
 65 70 75 80

Arg Gln Glu Val Ala Leu Ala Gly Glu Pro Ala Asp Gln Gln Thr  
 85 90 95

His Leu Arg Arg Leu Pro Tyr Arg Gln Thr Leu Gly Tyr Lys Glu Asp  
 100 105 110  
 Thr Thr Asn Pro Val Cys Gly Glu Pro Trp Trp Ser Glu Asp Leu Glu  
 115 120 125  
 Met Thr Arg His Trp Pro Trp Glu Val Ser Leu Arg Met Glu Asn Glu  
 130 135 140  
 His Val Cys Gly Gly Ala Leu Ile Asp Pro Ser Trp Val Val Thr Ala  
 145 150 155 160  
 Ala His Cys Ser Gln Gly Thr Lys Glu Tyr Ser Val Val Leu Gly Thr  
 165 170 175  
 Ser Lys Leu Gln Pro Met Asn Phe Ser Arg Ala Leu Trp Val Pro Val  
 180 185 190  
 Arg Asp Ile Ile Met His Pro Lys Tyr Trp Gly Arg Ala Phe Ile Met  
 195 200 205  
 Gly Asp Val Ala Leu Val His Leu Gln Thr Pro Val Thr Phe Ser Glu  
 210 215 220  
 Tyr Val Gln Pro Ile Cys Leu Pro Glu Pro Asn Phe Asn Leu Lys Val  
 225 230 235 240  
 Gly Thr Gln Cys Trp Val Thr Gly Trp Ser Gln Val Lys Gln Arg Phe  
 245 250 255  
 Ser Gly Ser Thr Ala Asn Ser Met Leu Thr Pro Glu Leu Gln Glu Ala  
 260 265 270  
 Glu Val Phe Ile Met Asp Asn Lys Arg Cys Asp Arg His Tyr Lys Lys  
 275 280 285  
 Ser Phe Phe Pro Pro Val Val Pro Leu Val Leu Gly Asp Met Ile Cys  
 290 295 300  
 Ala Thr Asn Tyr Gly Glu Asn Leu Cys Tyr Gly Asp Ser Gly Gly Pro  
 305 310 315 320  
 Leu Ala Cys Glu Val Glu Gly Arg Trp Ile Leu Ala Gly Val Leu Ser  
 325 330 335  
 Trp Glu Lys Ala Cys Val Lys Ala Gln Asn Pro Gly Val Tyr Thr Arg  
 340 345 350  
 Ile Thr Lys Tyr Thr Lys Trp Ile Lys Lys Gln Met Ser Asn Gly Ala  
 355 360 365  
 Phe Ser Gly Pro Cys Ala Ser Ala Cys Leu Leu Phe Leu Cys Trp Pro  
 370 375 380  
 Leu Gln Pro Gln Met Gly Ser  
 385 390

<210> 84  
 <211> 227  
 <212> PRT  
 <213> Homo sapiens

<400> 84  
 Ile Leu Thr Pro Val Cys Gly Arg Thr Pro Leu Arg Ile Val Gly Gly  
 1 5 10 15  
 Val Asp Ala Glu Glu Gly Arg Trp Pro Trp Gln Val Ser Val Arg Thr  
 20 25 30  
 Lys Gly Arg His Ile Cys Gly Gly Thr Leu Val Thr Ala Thr Trp Val  
 35 40 45  
 Leu Thr Ala Gly His Cys Ile Ser Ser Arg Phe His Tyr Ser Val Lys  
 50 55 60  
 Met Gly Asp Arg Ser Val Tyr Asn Glu Asn Thr Ser Val Val Val Ser  
 65 70 75 80  
 Val Gln Arg Ala Phe Val His Pro Lys Phe Ser Thr Val Thr Thr Ile  
 85 90 95  
 Arg Asn Asp Leu Ala Leu Leu Gln Leu Gln His Pro Val Asn Phe Thr  
 100 105 110  
 Ser Asn Ile Gln Pro Ile Cys Ile Pro Gln Glu Asn Phe Gln Val Glu  
 115 120 125  
 Gly Arg Thr Arg Cys Trp Val Thr Gly Trp Gly Lys Thr Pro Glu Arg  
 130 135 140  
 Gly Glu Lys Leu Ala Ser Glu Ile Leu Gln Asp Val Asp Gln Tyr Ile  
 145 150 155 160  
 Met Cys Tyr Glu Glu Cys Asn Lys Ile Ile Gln Lys Ala Leu Ser Ser  
 165 170 175  
 Thr Lys Asp Val Ile Ile Lys Gly Met Val Cys Gly Tyr Lys Glu Gln  
 180 185 190  
 Gly Lys Asp Ser Cys Gln Gly Asp Ser Gly Gly Arg Leu Ala Cys Glu  
 195 200 205  
 Tyr Asn Asp Thr Trp Val Gln Val Gly Ile Val Ser Trp Gly Ile Gly  
 210 215 220  
 Cys Gly Arg  
 225

<210> 85  
 <211> 296  
 <212> PRT  
 <213> Homo sapiens

<400> 85  
 Met Gly Ala Arg Gly Ala Leu Leu Leu Ala Leu Leu Ala Arg Ala  
 1 5 10 15  
 Gly Leu Gly Lys Pro Glu Ala Cys Gly His Arg Glu Ile His Ala Leu  
 20 25 30  
 Val Ala Gly Gly Val Glu Ser Ala Arg Gly Arg Trp Pro Trp Gln Ala  
 35 40 45  
 Ser Leu Arg Leu Arg Arg Arg His Arg Cys Gly Ser Leu Leu Ser  
 50 55 60  
 Arg Arg Trp Val Leu Ser Ala Ala His Cys Phe Gln Lys His Tyr Tyr  
 65 70 75 80  
 Pro Ser Glu Trp Thr Val Gln Leu Gly Glu Leu Thr Ser Arg Pro Thr  
 85 90 95  
 Pro Trp Asn Leu Arg Ala Tyr Ser Ser Arg Tyr Lys Val Gln Asp Ile  
 100 105 110  
 Ile Val Asn Pro Asp Ala Leu Gly Val Leu Arg Asn Asp Ile Ala Leu  
 115 120 125  
 Leu Arg Leu Ala Ser Ser Val Thr Tyr Asn Ala Tyr Ile Gln Pro Ile  
 130 135 140  
 Cys Ile Glu Ser Ser Thr Phe Asn Phe Val His Arg Pro Asp Cys Trp  
 145 150 155 160  
 Val Thr Gly Trp Gly Leu Ile Ser Pro Ser Gly Thr Pro Leu Pro Pro  
 165 170 175  
 Pro Tyr Asn Leu Arg Glu Ala Gln Val Thr Ile Leu Asn Asn Thr Arg  
 180 185 190  
 Cys Asn Tyr Leu Phe Glu Gln Pro Ser Ser Arg Ser Met Ile Trp Asp  
 195 200 205  
 Ser Met Phe Cys Ala Gly Ala Glu Asp Gly Ser Val Asp Thr Cys Lys  
 210 215 220  
 Gly Asp Ser Gly Gly Pro Leu Val Cys Asp Lys Asp Gly Leu Trp Tyr  
 225 230 235 240  
 Gln Val Gly Ile Val Ser Trp Gly Met Asp Cys Gly Gln Pro Asn Arg  
 245 250 255  
 Pro Gly Val Tyr Thr Asn Ile Ser Val Tyr Phe His Trp Ile Arg Arg  
 260 265 270  
 Val Met Ser His Ser Thr Pro Arg Pro Asn Pro Ser Gln Leu Leu Leu  
 275 280 285  
 Leu Leu Ala Leu Leu Trp Ala Pro  
 290 295

<210> 86  
 <211> 628  
 <212> PRT  
 <213> Homo sapiens

<400> 86  
 Met Gly Ser Thr Trp Gly Ser Pro Gly Trp Val Arg Leu Ala Leu Cys  
 1 5 10 15  
 Leu Thr Gly Leu Val Leu Ser Leu Tyr Ala Leu His Val Lys Ala Ala  
 20 25 30  
 Arg Ala Arg Asp Arg Asp Tyr Arg Ala Leu Cys Asp Val Gly Thr Ala  
 35 40 45  
 Ile Ser Cys Ser Arg Val Phe Ser Ser Arg Trp Gly Arg Gly Phe Gly  
 50 55 60  
 Leu Val Glu His Val Leu Gly Gln Asp Ser Ile Leu Asn Gln Ser Asn  
 65 70 75 80  
 Ser Ile Phe Gly Cys Ile Phe Tyr Thr Leu Gln Leu Leu Leu Gly Leu  
 85 90 95  
 Gln Ala Ala Gln Arg Ala Cys Gly Gln Arg Gly Pro Gly Pro Pro Lys  
 100 105 110  
 Pro Gln Glu Gly Asn Thr Val Pro Gly Glu Trp Pro Trp Gln Ala Ser  
 115 120 125  
 Val Arg Arg Gln Gly Ala His Ile Cys Ser Gly Ser Leu Val Ala Asp  
 130 135 140  
 Thr Trp Val Leu Thr Ala Ala His Cys Phe Glu Lys Ala Ala Ala Thr  
 145 150 155 160  
 Glu Leu Asn Ser Trp Ser Val Val Leu Gly Ser Leu Gln Arg Glu Gly  
 165 170 175  
 Leu Ser Pro Gly Ala Glu Glu Val Gly Val Ala Ala Leu Gln Leu Pro  
 180 185 190  
 Arg Ala Tyr Asn His Tyr Ser Gln Gly Ser Asp Leu Ala Leu Leu Gln  
 195 200 205  
 Leu Ala His Pro Thr Thr His Thr Pro Leu Cys Leu Pro Gln Pro Ala  
 210 215 220  
 His Arg Phe Pro Phe Gly Ala Ser Cys Trp Ala Thr Gly Trp Asp Gln  
 225 230 235 240  
 Asp Thr Ser Asp Ala Pro Gly Thr Leu Arg Asn Leu Arg Leu Arg Leu  
 245 250 255  
 Ile Ser Arg Pro Thr Cys Asn Cys Ile Tyr Asn Gln Leu His Gln Arg  
 260 265 270

His Leu Ser Asn Pro Ala Arg Pro Gly Met Leu Cys Gly Gly Pro Gln  
 275 280 285

Pro Gly Val Gln Gly Pro Cys Gln Gly Asp Ser Gly Gly Pro Val Leu  
 290 295 300

Cys Leu Glu Pro Asp Gly His Trp Val Gln Ala Gly Ile Ile Ser Phe  
 305 310 315 320

Ala Ser Ser Cys Ala Gln Glu Asp Ala Pro Val Leu Leu Thr Asn Thr  
 325 330 335

Ala Ala His Ser Ser Trp Leu Gln Ala Arg Val Gln Gly Ala Ala Phe  
 340 345 350

Leu Ala Gln Ser Pro Glu Thr Pro Glu Met Ser Asp Glu Asp Ser Cys  
 355 360 365

Val Ala Cys Gly Ser Leu Arg Thr Ala Gly Pro Gln Ala Gly Ala Pro  
 370 375 380

Ser Pro Trp Pro Trp Glu Ala Arg Leu Met His Gln Gly Gln Leu Ala  
 385 390 395 400

Cys Gly Gly Ala Leu Val Ser Glu Glu Ala Val Leu Thr Ala Ala His  
 405 410 415

Cys Phe Ile Gly Arg Gln Ala Pro Glu Glu Trp Ser Val Gly Leu Gly  
 420 425 430

Thr Arg Pro Glu Glu Trp Gly Leu Lys Gln Leu Ile Leu His Gly Ala  
 435 440 445

Tyr Thr His Pro Glu Gly Gly Tyr Asp Met Ala Leu Leu Leu Leu Ala  
 450 455 460

Gln Pro Val Thr Leu Gly Ala Ser Leu Arg Pro Leu Cys Leu Pro Tyr  
 465 470 475 480

Pro Asp His His Leu Pro Asp Gly Glu Arg Gly Trp Val Leu Gly Arg  
 485 490 495

Ala Arg Pro Gly Ala Gly Ile Ser Ser Leu Gln Thr Val Pro Val Thr  
 500 505 510

Leu Leu Gly Pro Arg Ala Cys Ser Arg Leu His Ala Ala Pro Gly Gly  
 515 520 525

Asp Gly Ser Pro Ile Leu Pro Gly Met Val Cys Thr Ser Ala Val Gly  
 530 535 540

Glu Leu Pro Ser Cys Glu Gly Leu Ser Gly Ala Pro Leu Val His Glu  
 545 550 555 560

Val Arg Gly Thr Trp Phe Leu Ala Gly Leu His Ser Phe Gly Asp Ala  
 565 570 575

Cys Gln Gly Pro Ala Arg Pro Ala Val Phe Thr Ala Leu Pro Ala Tyr  
 580 585 590

Glu Asp Trp Val Ser Ser Leu Asp Trp Gln Val Tyr Phe Ala Glu Glu  
 595 600 605

Pro Glu Pro Glu Ala Glu Pro Gly Ser Cys Leu Ala Asn Ile Ser Gln  
 610 615 620

Pro Thr Ser Cys  
 625

<210> 87  
 <211> 276  
 <212> PRT  
 <213> Homo sapiens

<400> 87  
 Met Arg Ala Pro His Leu His Leu Ser Ala Ala Ser Gly Ala Arg Ala  
 1 5 10 15

Leu Ala Lys Leu Leu Pro Leu Leu Met Ala Gln Leu Trp Ala Ala Glu  
 20 25 30

Ala Ala Leu Leu Pro Gln Asn Asp Thr Arg Leu Asp Pro Glu Ala Tyr  
 35 40 45

Gly Ala Pro Cys Ala Arg Gly Ser Gln Pro Trp Gln Val Ser Leu Phe  
 50 55 60

Asn Gly Leu Ser Phe His Cys Ala Gly Val Leu Val Asp Gln Ser Trp  
 65 70 75 80

Val Leu Thr Ala Ala His Cys Gly Asn Lys Pro Leu Trp Ala Arg Val  
 85 90 95

Gly Asp Asp His Leu Leu Leu Gln Gly Glu Gln Leu Arg Arg Thr  
 100 105 110

Thr Arg Ser Val Val His Pro Lys Tyr His Gln Gly Ser Gly Pro Ile  
 115 120 125

Leu Pro Arg Arg Thr Asp Glu His Asp Leu Met Leu Leu Lys Leu Ala  
 130 135 140

Arg Pro Val Val Pro Gly Pro Arg Val Arg Ala Leu Gln Leu Pro Tyr  
 145 150 155 160

Arg Cys Ala Gln Pro Gly Asp Gln Cys Gln Val Ala Gly Trp Gly Thr  
 165 170 175

Thr Ala Ala Arg Arg Val Lys Tyr Asn Lys Gly Leu Thr Cys Ser Ser  
 180 185 190

Ile Thr Ile Leu Ser Pro Lys Glu Cys Glu Val Phe Tyr Pro Gly Val  
 195 200 205

Val Thr Asn Asn Met Ile Cys Ala Gly Leu Asp Arg Gly Gln Asp Pro  
 210 215 220

Cys Gln Ser Asp Ser Gly Gly Pro Leu Val Cys Asp Glu Thr Leu Gln  
 225 230 235 240

Gly Ile Leu Ser Trp Gly Val Tyr Pro Cys Gly Ser Ala Gln His Pro  
 245 250 255

Ala Val Tyr Thr Gln Ile Cys Lys Tyr Met Ser Trp Ile Asn Lys Val  
 260 265 270

Ile Arg Ser Asn  
 275

<210> 88  
 <211> 285  
 <212> PRT  
 <213> Homo sapiens

<400> 88  
 Asn Val Gln Cys Gly His Arg Pro Ala Phe Pro Asn Ser Ser Trp Leu  
 1 5 10 15

Pro Phe His Glu Arg Leu Gln Val Gln Asn Gly Glu Cys Pro Trp Gln  
 20 25 30

Val Ser Ile Gln Met Ser Arg Lys His Leu Cys Gly Gly Ser Ile Leu  
 35 40 45

His Trp Trp Trp Val Leu Thr Ala Ala His Cys Phe Arg Arg Thr Leu  
 50 55 60

Leu Asp Met Ala Val Val Asn Val Thr Val Val Met Gly Thr Arg Thr  
 65 70 75 80

Phe Ser Asn Ile His Ser Glu Arg Lys Gln Val Gln Lys Val Ile Ile  
 85 90 95

His Lys Tyr Tyr Lys Pro Pro Gln Leu Asp Ser Asp Leu Ser Leu Leu  
 100 105 110

Leu Leu Ala Thr Pro Val Gln Phe Ser Asn Phe Lys Met Pro Val Cys  
 115 120 125

Leu Gln Glu Glu Glu Arg Thr Trp Asp Trp Cys Trp Met Ala Gln Trp  
 130 135 140

Val Thr Thr Asn Gly Tyr Asp Gln Tyr Asp Asp Leu Asn Met His Leu  
 145 150 155 160

Glu Lys Leu Arg Val Val Gln Ile Ser Arg Lys Glu Cys Ala Lys Arg  
 165 170 175

Val Asn Gln Leu Ser Arg Asn Met Ile Cys Ala Trp Asn Glu Pro Gly  
 180 185 190

Thr Asn Gly Gln Gly Pro Gly Glu Val Gly Gly Pro Leu Val Cys Gln  
 195 200 205

Lys Lys Asn Lys Ser Thr Trp Tyr Gln Leu Gly Ile Ile Ser Trp Gly  
 210 215 220

Val Gly Cys Gly Gln Lys Asn Met Pro Gly Val Tyr Thr Glu Leu Ser  
 225 230 235 240

Asn Tyr Leu Leu Trp Ile Glu Arg Lys Thr Val Leu Ala Gly Lys Pro  
 245 250 255

Tyr Lys Tyr Glu Pro Asp Ser Val Tyr Ala Leu Leu Ser Pro Trp  
 260 265 270

Ala Ile Leu Leu Leu Tyr Phe Val Met Leu Leu Leu Ser  
 275 280 285

<210> 89

<211> 413

<212> PRT

<213> Homo sapiens

<400> 89

Met Glu Asn Met Leu Leu Trp Leu Ile Phe Phe Thr Pro Gly Trp Thr  
 1 5 10 15

Leu Ile Asp Gly Ser Glu Met Glu Trp Asp Phe Met Trp His Leu Arg  
 20 25 30

Lys Val Pro Arg Ile Val Ser Glu Arg Thr Phe His Leu Thr Ser Pro  
 35 40 45

Ala Phe Glu Ala Asp Ala Lys Met Met Val Asn Thr Val Cys Gly Ile  
 50 55 60

Glu Cys Gln Lys Glu Leu Pro Thr Pro Ser Leu Ser Glu Leu Glu Asp  
 65 70 75 80

Tyr Leu Ser Tyr Glu Thr Val Phe Glu Asn Gly Thr Arg Thr Leu Thr  
 85 90 95

Arg Val Lys Val Gln Asp Leu Val Leu Glu Pro Thr Gln Asn Ile Thr  
 100 105 110

Thr Lys Gly Val Ser Val Arg Arg Lys Arg Gln Val Tyr Gly Thr Asp  
 115 120 125

Ser Arg Phe Ser Ile Leu Asp Lys Arg Phe Leu Thr Asn Phe Pro Phe  
 130 135 140

Ser Thr Ala Val Lys Leu Ser Thr Gly Cys Ser Gly Ile Leu Ile Ser  
 145 150 155 160

Pro Gln His Val Leu Thr Ala Ala His Cys Val His Asp Gly Lys Asp  
 165 170 175

Tyr Val Lys Gly Ser Lys Lys Leu Arg Val Gly Leu Leu Lys Met Arg  
 180 185 190  
 Asn Lys Ser Gly Gly Lys Lys Arg Arg Gly Ser Lys Arg Ser Arg Arg  
 195 200 205  
 Glu Ala Ser Gly Gly Asp Gln Arg Glu Gly Thr Arg Glu His Leu Pro  
 210 215 220  
 Glu Arg Ala Lys Gly Gly Arg Arg Arg Lys Lys Ser Gly Arg Gly Gln  
 225 230 235 240  
 Arg Ile Ala Glu Gly Arg Pro Ser Phe Gln Trp Thr Arg Val Lys Asn  
 245 250 255  
 Thr His Ile Pro Lys Gly Trp Ala Arg Gly Gly Met Gly Asp Ala Thr  
 260 265 270  
 Leu Asp Tyr Asp Tyr Ala Leu Leu Glu Leu Lys Arg Ala His Lys Lys  
 275 280 285  
 Lys Tyr Met Glu Leu Gly Ile Ser Pro Thr Ile Lys Lys Met Pro Gly  
 290 295 300  
 Gly Met Ile His Phe Ser Gly Phe Asp Asn Asp Arg Ala Asp Gln Leu  
 305 310 315 320  
 Val Tyr Arg Phe Cys Ser Val Ser Asp Glu Ser Asn Asp Leu Leu Tyr  
 325 330 335  
 Gln Tyr Cys Asp Ala Glu Ser Gly Ser Thr Gly Ser Gly Val Tyr Leu  
 340 345 350  
 Arg Leu Lys Asp Pro Asp Lys Lys Asn Trp Lys Arg Lys Ile Ile Ala  
 355 360 365  
 Val Tyr Ser Gly His Gln Trp Val Asp Val His Gly Val Gln Lys Asp  
 370 375 380  
 Tyr Asn Val Ala Val Arg Ile Thr Pro Leu Lys Tyr Ala Gln Ile Cys  
 385 390 395 400  
 Leu Trp Ile His Gly Asn Asp Ala Asn Cys Ala Tyr Gly  
 405 410

<210> 90  
 <211> 320  
 <212> PRT  
 <213> Homo sapiens

<400> 90  
 Met Gly Asp Pro Glu Gly Ser Ala Glu Trp Gly Trp Gly Lys Gly Ile  
 1 5 10 15  
 Pro Val Val Arg Arg Asn Leu Leu Thr Val Asp Gly Ile Ser Leu Cys  
 20 25 30

Leu Glu Gly Ser Trp Trp Arg Gln Lys Gly Pro Ala Ser Pro Gly Phe  
 35 40 45

Ser His Ser Leu Pro Arg Leu Gln Pro Asn Pro Gly Pro Ser Ser Thr  
 50 55 60

Met Trp Leu Leu Leu Thr Leu Ser Phe Leu Leu Ala Ser Thr Ala Ala  
 65 70 75 80

Gln Asp Gly Asp Lys Leu Leu Glu Gly Asp Glu Cys Ala Pro His Ser  
 85 90 95

Gln Pro Trp Gln Val Ala Leu Tyr Glu Arg Gly Arg Phe Asn Cys Gly  
 100 105 110

Ala Ser Leu Ile Ser Pro His Trp Val Leu Ser Ala Ala His Cys Gln  
 115 120 125

Ser Arg Phe Met Arg Val Arg Leu Gly Glu His Asn Leu Arg Lys Arg  
 130 135 140

Asp Gly Pro Glu Gln Leu Arg Thr Thr Ser Arg Val Ile Pro His Pro  
 145 150 155 160

Arg Tyr Glu Ala Arg Ser His Arg Asn Asp Ile Met Leu Leu Arg Leu  
 165 170 175

Val Gln Pro Ala Arg Leu Asn Pro Gln Val Arg Pro Ala Val Leu Pro  
 180 185 190

Thr Arg Cys Pro His Pro Gly Glu Ala Cys Val Val Ser Gly Trp Gly  
 195 200 205

Leu Val Ser His Asn Glu Pro Gly Thr Ala Gly Ser Pro Arg Ser Gln  
 210 215 220

Val Ser Leu Pro Asp Thr Leu His Cys Ala Asn Ile Ser Ile Ile Ser  
 225 230 235 240

Asp Thr Ser Cys Asp Lys Ser Tyr Pro Gly Arg Leu Thr Asn Thr Met  
 245 250 255

Val Cys Ala Gly Ala Glu Gly Arg Gly Ala Glu Ser Cys Glu Gly Asp  
 260 265 270

Ser Gly Gly Pro Leu Val Cys Gly Gly Ile Leu Gln Gly Ile Val Ser  
 275 280 285

Trp Gly Asp Val Pro Cys Asp Asn Thr Thr Lys Pro Gly Val Tyr Thr  
 290 295 300

Lys Val Cys His Tyr Leu Glu Trp Ile Arg Glu Thr Met Lys Arg Asn  
 305 310 315 320

<210> 91  
 <211> 328  
 <212> PRT  
 <213> Homo sapiens

<400> 91  
 Met Gly Pro Ala Gly Cys Ala Phe Thr Leu Leu Leu Leu Leu Gly Ile  
 1 5 10 15

Ser Val Cys Gly Gln Pro Val Tyr Ser Ser Arg Val Val Gly Gly Gln  
 20 25 30

Asp Ala Ala Ala Gly Arg Trp Pro Trp Gln Val Ser Leu His Phe Asp  
 35 40 45

His Asn Phe Ile Cys Gly Gly Ser Leu Val Ser Glu Arg Leu Ile Leu  
 50 55 60

Thr Ala Ala His Cys Ile Gln Pro Thr Trp Thr Thr Phe Ser Tyr Thr  
 65 70 75 80

Val Trp Leu Gly Ser Ile Thr Val Gly Asp Ser Arg Lys Arg Val Lys  
 85 90 95

Tyr Tyr Val Ser Lys Ile Val Ile His Pro Lys Tyr Gln Asp Thr Thr  
 100 105 110

Ala Asp Val Ala Leu Leu Lys Leu Ser Ser Gln Val Thr Phe Thr Ser  
 115 120 125

Ala Ile Leu Pro Ile Cys Leu Pro Ser Val Thr Lys Gln Leu Ala Ile  
 130 135 140

Pro Pro Phe Cys Trp Val Thr Gly Trp Gly Lys Val Lys Glu Ser Ser  
 145 150 155 160

Asp Arg Asp Tyr His Ser Ala Leu Gln Glu Ala Glu Val Pro Ile Ile  
 165 170 175

Asp Arg Gln Ala Cys Glu Gln Leu Tyr Asn Pro Ile Gly Ile Phe Leu  
 180 185 190

Pro Ala Leu Glu Pro Val Ile Lys Glu Asp Lys Ile Cys Ala Gly Asp  
 195 200 205

Thr Gln Asn Met Lys Asp Ser Cys Lys Gly Asp Ser Gly Gly Pro Leu  
 210 215 220

Ser Cys His Ile Asp Gly Val Trp Ile Gln Thr Gly Val Val Ser Trp  
 225 230 235 240

Gly Leu Glu Cys Gly Lys Ser Leu Pro Gly Val Tyr Thr Asn Val Ile  
 245 250 255

Tyr Tyr Gln Lys Trp Ile Asn Ala Thr Ile Ser Arg Ala Asn Asn Leu  
 260 265 270

Asp Phe Ser Asp Phe Leu Phe Pro Ile Val Leu Leu Ser Leu Ala Leu  
 275 280 285

Leu Arg Pro Ser Cys Ala Phe Gly Pro Asn Thr Ile His Arg Val Gly  
 290 295 300

Thr Val Ala Glu Ala Val Ala Cys Ile Gln Gly Trp Glu Glu Asn Ala  
 305 310 315 320

Trp Arg Phe Ser Pro Arg Gly Arg  
 325

<210> 92  
 <211> 425  
 <212> PRT  
 <213> Homo sapiens

<400> 92  
 Met Met Tyr Ala Pro Val Glu Phe Ser Glu Ala Glu Phe Ser Arg Ala  
 1 5 10 15

Glu Tyr Gln Arg Lys Gln Gln Phe Trp Asp Ser Val Arg Leu Ala Leu  
 20 25 30

Phe Thr Leu Ala Ile Val Ala Ile Ile Gly Ile Ala Ile Gly Ile Val  
 35 40 45

Thr His Phe Val Val Glu Asp Asp Lys Ser Phe Tyr Tyr Leu Ala Ser  
 50 55 60

Phe Lys Val Thr Asn Ile Lys Tyr Lys Glu Asn Tyr Gly Ile Arg Ser  
 65 70 75 80

Ser Arg Glu Phe Ile Glu Arg Ser His Gln Ile Glu Arg Met Met Ser  
 85 90 95

Arg Ile Phe Arg His Ser Ser Val Gly Gly Arg Phe Ile Lys Ser His  
 100 105 110

Val Ile Lys Leu Ser Pro Asp Glu Gln Gly Val Asp Ile Leu Ile Val  
 115 120 125

Leu Ile Phe Arg Tyr Pro Ser Thr Asp Ser Ala Glu Gln Ile Lys Lys  
 130 135 140

Lys Ile Glu Lys Ala Leu Tyr Gln Ser Leu Lys Thr Lys Gln Leu Ser  
 145 150 155 160

Leu Thr Ile Asn Lys Pro Ser Phe Arg Leu Thr Arg Cys Gly Ile Arg  
 165 170 175

Met Thr Ser Ser Asn Met Pro Leu Pro Ala Ser Ser Ser Thr Gln Arg  
 180 185 190

Ile Val Gln Gly Arg Glu Thr Ala Met Glu Gly Glu Trp Pro Trp Gln  
 195 200 205

Ala Ser Leu Gln Leu Ile Gly Ser Gly His Gln Cys Gly Ala Ser Leu  
 210 215 220  
 Ile Ser Asn Thr Trp Leu Leu Thr Ala Ala His Cys Phe Trp Lys Asn  
 225 230 235 240  
 Lys Asp Pro Thr Gln Trp Ile Ala Thr Phe Gly Ala Thr Ile Thr Pro  
 245 250 255  
 Pro Ala Val Lys Arg Asn Val Arg Lys Ile Ile Leu His Glu Asn Tyr  
 260 265 270  
 His Arg Glu Thr Asn Glu Asn Asp Ile Ala Leu Val Gln Leu Ser Thr  
 275 280 285  
 Gly Val Glu Phe Ser Asn Ile Val Gln Arg Val Cys Leu Pro Asp Ser  
 290 295 300  
 Ser Ile Lys Leu Pro Pro Lys Thr Ser Val Phe Val Thr Gly Phe Gly  
 305 310 315 320  
 Ser Ile Val Asp Asp Gly Pro Ile Gln Asn Thr Leu Arg Gln Ala Arg  
 325 330 335  
 Val Glu Thr Ile Ser Thr Asp Val Cys Asn Arg Lys Asp Val Tyr Asp  
 340 345 350  
 Gly Leu Ile Thr Pro Gly Met Leu Cys Ala Gly Phe Met Glu Gly Lys  
 355 360 365  
 Ile Asp Ala Cys Lys Gly Asp Ser Gly Gly Pro Leu Val Tyr Asp Asn  
 370 375 380  
 His Asp Ile Trp Tyr Ile Val Gly Ile Val Ser Trp Gly Gln Ser Cys  
 385 390 395 400  
 Ala Leu Pro Lys Lys Pro Gly Val Tyr Thr Arg Val Thr Lys Tyr Arg  
 405 410 415  
 Asp Trp Ile Ala Ser Lys Thr Gly Met  
 420 425

&lt;210&gt; 93

&lt;211&gt; 222

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 93

Arg Ile Ala Glu Gly Leu Asp Ala Glu Glu Gly Glu Trp Pro Trp Gln  
 1 .5 10 15

Ala Ser Leu Pro Gln Asn Asn Val Tyr Arg Arg Gly Ala Thr Trp Leu  
 20 25 30

Ser Asn Ser Trp Leu Ile Thr Ala Ala His Cys Phe Ile Arg Val His  
 35 40 45

120

Asp Pro Lys Glu Trp Asn Val Ile Leu Ser Asn Pro Gln Thr Gln Ser  
50 55 60

Asn Ile Lys Asn Val Ile Ile Gln Glu Asn Tyr His Tyr Pro Ala His  
65 70 75 80

Asp Asn Asp Ile Ala Val Val His Leu Ser Ser Pro Val Leu Tyr Thr  
85 90 95

Ser Asn Ile Gln Lys Ala Cys Leu Pro Asp Val Asn Tyr Ile Phe Leu  
100 105 110

Tyr Asn Ser Glu Ala Val Val Thr Ala Trp Gly Ser Phe Lys Pro Leu  
115 120 125

Arg Thr Thr Ser Asn Val Leu His Lys Gly Leu Val Lys Ile Ile Asp  
130 135 140

Asn Arg Thr Cys Asn Asn Gly Glu Ala Asp Gly Arg Val Ile Thr Ser  
145 150 155 160

Gly Met Leu Cys Ala Gly Phe Leu Glu Pro Arg Val Asp Ala Cys Gln  
165 170 175

Gly Asp Ser Gly Gly Pro Leu Val Gly Thr Asp Ser Lys Gly Ile Leu  
180 185 190

Ala Lys Gly Ser Leu Leu Val Leu Lys Ala Gly Val Asn Glu Arg Ala  
195 200 205

Leu Pro Asn Lys Pro Ser Val Tyr Thr Gln Val Thr Tyr Tyr  
210 215 220

<210> 94  
<211> 948  
<212> PRT  
<213> Homo sapiens

<400> 94  
Met Val Ser Lys Gly Gly Val Ala Ala Glu Pro Glu Pro His Tyr Cys  
1 5 10 15

Glu Asp Ser Glu Arg Gly Pro Asn Thr Leu Thr Gly Pro Gly Ser Leu  
20 25 30

Pro Arg Gly Gly Gly Ile Glu Val Gly Met Glu Phe Pro Gly Cys Ser  
35 40 45

Gly Glu Gly Cys Val Lys Pro His Glu Glu Ala Ala Arg Glu Gly Ala  
50 55 60

Gly Arg Gly Lys Arg Ala Val Pro Gly Pro Lys Arg Arg Gln Gln Gly  
65 70 75 80

Ser Ala Glu Gly Pro Ala Ala Gly Trp Thr Leu Glu Gln Glu Thr Arg  
85 90 95

Gly Asp Val Leu Glu Asp Lys Asn Glu Arg Ala Asp Glu Glu Ile Leu  
 100 105 110

Arg Leu Ala Pro Gly Lys Gly Arg Leu Pro Ile Asp Ser Lys His Leu  
 115 120 125

Lys Pro Val Ile Ser Ser Phe Pro Val Arg Ser Gln Glu Leu Gly Glu  
 130 135 140

Gly Ala Gly Ala Gly Thr Leu Arg Gly Lys Met Ala Glu Phe Asn Trp  
 145 150 155 160

Ser Met Ala Phe Lys Gly Pro Ala Ala Gly His Glu Glu Arg Leu Asn  
 165 170 175

Ser Val Ser Ser Arg Ala Lys Lys Gly Ile Gly Trp Asp Val Ala Ala  
 180 185 190

Ala Ser Leu Arg Gly Val Asp His Phe Ser Asp Leu Pro Pro Pro Leu  
 195 200 205

Gln Val Arg Glu Glu Leu Glu Ala Cys Ala Phe Arg Val Gln Val Gly  
 210 215 220

Gln Leu Arg Leu Tyr Glu Asp Asp Gln Arg Thr Lys Val Val Glu Ile  
 225 230 235 240

Val Arg His Pro Gln Tyr Asn Glu Ser Leu Ser Ala Gln Gly Gly Ala  
 245 250 255

Asp Ile Ala Leu Leu Lys Leu Glu Ala Pro Val Pro Leu Ser Glu Leu  
 260 265 270

Ile His Pro Val Ser Leu Pro Ser Ala Ser Leu Asp Val Pro Ser Gly  
 275 280 285

Lys Thr Cys Trp Val Thr Gly Trp Gly Val Ile Gly Arg Gly Glu Leu  
 290 295 300

Leu Pro Trp Pro Leu Ser Leu Trp Glu Ala Thr Val Lys Val Arg Ser  
 305 310 315 320

Asn Val Leu Cys Asn Gln Thr Cys Arg Arg Arg Phe Pro Ser Asn His  
 325 330 335

Thr Glu Arg Phe Glu Arg Leu Ile Lys Asp Asp Met Leu Cys Ala Gly  
 340 345 350

Asp Gly Asn His Gly Ser Trp Pro Gly Asp Asn Gly Gly Pro Leu Leu  
 355 360 365

Cys Arg Arg Asn Cys Thr Trp Val Gln Val Glu Val Val Ser Trp Gly  
 370 375 380

Lys Leu Cys Gly Leu Arg Gly Tyr Pro Gly Met Tyr Thr Arg Val Thr  
 385 390 395 400

Ser Tyr Val Ser Trp Ile Arg Gln Pro Cys Pro Ser Ala Gln Thr Pro  
 405 410 415

Ala Val Val Arg Arg Phe Val Leu Pro Pro Asn Pro Asp Val Glu Ala  
 420 425 430

Leu Thr Pro Ser Val Met Gly Ser Gly Ala Pro Leu Pro Pro Ala Pro  
 435 440 445

Asp Leu Gln Glu Ala Glu Val Pro Ile Met Arg Thr Arg Ala Cys Glu  
 450 455 460

Arg Met Tyr His Lys Gly Pro Thr Ala His Gly Gln Val Thr Ile Ile  
 465 470 475 480

Lys Ala Ala Met Pro Cys Ala Gly Arg Lys Gly Gln Gly Ser Cys Gln  
 485 490 495

Ala Ala Leu Arg Thr Glu Asp Leu Thr Pro Thr Thr Pro Asn Thr Glu  
 500 505 510

Val Ser Pro Arg Ala Asp Pro Arg Leu Ser Gln Pro Glu Asp Ile Trp  
 515 520 525

Pro Glu Trp Ala Trp Pro Val Val Val Gly Thr Thr Met Leu Leu Leu  
 530 535 540

Leu Leu Phe Leu Ala Val Ser Ser Leu Gly Ser Cys Ser Thr Gly Ser  
 545 550 555 560

Pro Ala Pro Val Pro Glu Asn Asp Leu Val Gly Ile Val Gly Gly His  
 565 570 575

Asn Thr Pro Gly Glu Val Val Ala Val Gly Ala Asp Arg Arg Ser  
 580 585 590

Leu His Phe Pro Glu Gly His Arg Pro Val His Leu Pro Asp Ser His  
 595 600 605

Gln Gly Cys Val Ser Val Arg Gly Pro Gly Ala Ala Glu Cys Gln Pro  
 610 615 620

Asp Arg Arg Pro Pro Asn Tyr Ser Val Phe Phe Leu Gly Ala Asp Ile  
 625 630 635 640

Ala Leu Leu Lys Leu Ala Thr Ser Ser Leu Glu Phe Thr Asp Ser Asp  
 645 650 655

Asn Cys Trp Asn Thr Gly Trp Gly Met Val Gly Leu Leu Asp Met Leu  
 660 665 670

Pro Pro Pro Tyr Arg Pro Gln Gln Val Lys Val Leu Thr Leu Ser Asn  
 675 680 685

Ala Asp Cys Glu Arg Gln Thr Tyr Asp Ala Phe Pro Gly Ala Gly Asp  
 690 695 700

Arg Lys Phe Ile Gln Asp Asp Met Ile Cys Ala Gly Arg Thr Gly Arg  
 705 710 715 720

Arg Thr Trp Lys Gly Asp Ser Gly Gly Pro Leu Val Cys Lys Lys Lys  
 725 730 735

Gly Thr Trp Leu Gln Ala Gly Val Val Ser Trp Gly Phe Tyr Ser Asp  
 740 745 750

Arg Pro Ser Ile Gly Val Tyr Thr Arg Pro Glu Thr Ser Trp Gln Gly  
 755 760 765

Ala Asn His Ala Asp Ala Gln Arg Pro Ala Gly Arg Val Pro Thr Met  
 770 775 780

Gln Arg Pro Arg Asp Met Gly Gln Gly Gln Glu Trp Val Cys Arg Pro  
 785 790 795 800

Phe Thr His Val Thr Cys Tyr Pro Thr Ala Ile Pro Arg Pro Phe Thr  
 805 810 815

His Val Thr Cys Tyr Leu Met Ala Val Pro Ser Thr Leu Thr His Val  
 820 825 830

Thr Cys Tyr Pro Thr Ala Val Pro Arg Pro Phe Thr His Val Thr Cys  
 835 840 845

Tyr Leu Met Ala Val Pro Ser Thr Leu Thr His Ile Thr Cys Tyr Met  
 850 855 860

Met Ala Val Pro Arg Pro Phe Thr His Ile Thr Cys Tyr Pro Met Ala  
 865 870 875 880

Val Pro Ser Thr Leu Thr His Val Thr Cys His Pro Thr Ala Ile Pro  
 885 890 895

Arg Pro Phe Thr His Ile Thr Cys Tyr Thr Met Ala Ile Pro Arg Pro  
 900 905 910

Ser Thr Thr Pro Pro Ala Thr Arg Arg Pro Ser Pro Ala Pro Ser Pro  
 915 920 925

Thr Ser Pro Ala Thr Arg Trp Pro Ser Pro Gly Pro Ser Pro Met Ser  
 930 935 940

Pro Ala Thr Arg  
 945

<210> 95  
 <211> 352  
 <212> PRT  
 <213> Homo sapiens

<400> 95  
 Met Leu Leu Phe Ser Val Leu Leu Leu Ser Leu Val Thr Arg Thr  
 1 5 10 15

Gln Leu Gly Pro Arg Thr Pro Leu Pro Glu Ala Gly Val Ala Ile Leu  
 20 25 30

Gly Arg Ala Arg Gly Ala His Arg Pro Gln Pro Pro His Pro Pro Ser  
 35 40 45

Pro Val Ser Glu Cys Gly Asp Arg Ser Ile Phe Glu Gly Arg Thr Arg  
 50 55 60

Tyr Ser Arg Ile Thr Gly Gly Met Glu Ala Glu Val Gly Glu Phe Pro  
 65 70 75 80

Trp Gln Val Ser Ile Gln Val Arg Ser Glu Pro Phe Cys Gly Ser  
 85 90 95

Ile Leu Asn Lys Trp Trp Ile Leu Thr Ala Ala His Cys Leu Tyr Ser  
 100 105 110

Glu Glu Leu Phe Pro Glu Glu Leu Ser Val Val Leu Gly Thr Asn Asp  
 115 120 125

Leu Thr Ser Pro Ser Met Glu Ile Lys Glu Val Ala Ser Ile Ile Leu  
 130 135 140

His Lys Asp Phe Lys Arg Ala Asn Met Asp Asn Asp Ile Ala Leu Leu  
 145 150 155 160

Leu Leu Ala Ser Pro Ile Lys Leu Asp Asp Leu Lys Val Pro Ile Cys  
 165 170 175

Leu Pro Thr Gln Pro Gly Pro Ala Thr Trp Arg Glu Cys Trp Val Ala  
 180 185 190

Gly Trp Gly Gln Thr Asn Ala Ala Asp Lys Asn Ser Val Lys Thr Asp  
 195 200 205

Leu Met Lys Ala Pro Met Val Ile Met Asp Trp Glu Glu Cys Ser Lys  
 210 215 220

Met Phe Pro Lys Leu Thr Lys Asn Met Leu Cys Ala Gly Tyr Lys Asn  
 225 230 235 240

Glu Ser Tyr Asp Ala Cys Lys Gly Asp Ser Gly Gly Pro Leu Val Cys  
 245 250 255

Thr Pro Glu Pro Gly Glu Lys Trp Tyr Gln Val Gly Ile Ile Ser Trp  
 260 265 270

Gly Lys Ser Cys Gly Glu Lys Asn Thr Pro Gly Ile Tyr Thr Ser Leu  
 275 280 285

Val Asn Tyr Asn Leu Trp Ile Glu Lys Val Thr Gln Leu Glu Gly Arg  
 290 295 300

Pro Phe Asn Ala Glu Lys Arg Arg Thr Ser Val Lys Gln Lys Pro Met  
 305 310 315 320

Gly Ser Pro Val Ser Gly Val Pro Glu Pro Gly Ser Pro Arg Ser Trp  
 325 330 335

Leu Leu Leu Cys Pro Leu Ser His Val Leu Phe Arg Ala Ile Leu Tyr  
 340 345 350

<210> 96  
 <211> 263  
 <212> PRT  
 <213> Homo sapiens

<400> 96  
 Met Ala Ser Leu Trp Leu Leu Ser Cys Phe Ser Leu Val Gly Ala Ala  
 1 5 10 15

Phe Gly Cys Gly Val Pro Ala Ile His Pro Val Leu Ser Gly Leu Ser  
 20 25 30

Arg Ile Val Asn Gly Glu Asp Ala Val Pro Gly Ser Trp Pro Trp Gln  
 35 40 45

Val Ser Leu Gln Asp Lys Thr Gly Phe His Phe Cys Gly Gly Ser Leu  
 50 55 60

Ile Ser Glu Asp Trp Val Val Thr Ala Ala His Cys Gly Val Arg Thr  
 65 70 75 80

Ser Asp Val Val Ala Gly Glu Phe Asp Gln Gly Ser Asp Glu Glu  
 85 90 95

Asn Ile Gln Val Leu Lys Ile Ala Lys Val Phe Lys Asn Pro Lys Phe  
 100 105 110

Ser Ile Leu Thr Val Asn Asn Asp Ile Thr Leu Leu Lys Leu Ala Thr  
 115 120 125

Pro Ala Arg Phe Ser Gln Thr Val Ser Ala Val Cys Leu Pro Ser Ala  
 130 135 140

Asp Asp Asp Phe Pro Ala Gly Thr Leu Cys Ala Thr Thr Gly Trp Gly  
 145 150 155 160

Lys Thr Lys Tyr Asn Ala Asn Lys Thr Pro Asp Lys Leu Gln Gln Ala  
 165 170 175

Ala Leu Pro Leu Leu Ser Asn Ala Glu Cys Lys Lys Ser Trp Gly Arg  
 180 185 190

Arg Ile Thr Asp Val Met Ile Cys Ala Gly Ala Ser Gly Val Ser Ser  
 195 200 205

Cys Met Gly Asp Ser Gly Gly Pro Leu Val Cys Gln Lys Asp Gly Ala  
 210 215 220

Trp Thr Leu Val Gly Ile Val Ser Trp Gly Ser Arg Thr Cys Ser Thr  
 225 230 235 240

Thr Thr Pro Ala Val Tyr Ala Arg Val Thr Lys Leu Ile Pro Trp Val  
 245 250 255

Gln Lys Ile Leu Ala Ala Asn  
 260

<210> 97  
 <211> 1128  
 <212> PRT  
 <213> Homo sapiens

<400> 97  
 Met Glu Pro Thr Val Ala Asp Val His Leu Val Pro Arg Thr Thr Lys  
 1 5 10 15

Glu Val Pro Ala Leu Asp Ala Ala Cys Cys Arg Ala Ala Ser Ile Gly  
 20 25 30

Val Val Ala Thr Ser Leu Val Val Leu Thr Leu Gly Val Leu Leu Gly  
 35 40 45

Gly Met Asn Asn Ser Arg His Ala Ala Leu Arg Ala Ala Thr Leu Pro  
 50 55 60

Gly Lys Val Tyr Ser Val Thr Pro Glu Ala Ser Lys Thr Thr Asn Pro  
 65 70 75 80

Pro Glu Gly Arg Asn Ser Glu His Ile Arg Thr Ser Ala Arg Thr Asn  
 85 90 95

Ser Gly His Thr Ile Phe Lys Lys Cys Asn Thr Gln Pro Phe Leu Ser  
 100 105 110

Thr Gln Gly Phe His Val Asp His Thr Ala Glu Leu Arg Gly Ile Arg  
 115 120 125

Trp Thr Ser Ser Leu Arg Arg Glu Thr Ser Asp Tyr His Arg Thr Leu  
 130 135 140

Thr Pro Thr Leu Glu Ala Leu Leu His Phe Leu Leu Arg Pro Leu Gln  
 145 150 155 160

Thr Leu Ser Leu Gly Leu Glu Glu Leu Leu Gln Arg Gly Ile Arg  
 165 170 175

Ala Arg Leu Arg Glu His Gly Ile Ser Leu Ala Ala Tyr Gly Thr Ile  
 180 185 190

Val Ser Ala Glu Leu Thr Gly Arg His Lys Gly Pro Leu Ala Glu Arg  
 195 200 205

Asp Phe Lys Ser Gly Arg Cys Pro Gly Asn Ser Phe Ser Cys Gly Asn  
 210 215 220

Ser Gln Cys Val Thr Lys Val Asn Pro Glu Cys Asp Asp Gln Glu Asp  
 225 230 235 240  
 Cys Ser Asp Gly Ser Asp Glu Ala His Cys Glu Cys Gly Leu Gln Pro  
 245 250 255  
 Ala Trp Arg Met Ala Gly Arg Ile Val Gly Gly Met Glu Ala Ser Pro  
 260 265 270  
 Gly Glu Phe Pro Trp Gln Ala Ser Leu Arg Glu Asn Lys Glu His Phe  
 275 280 285  
 Cys Gly Ala Ala Ile Ile Asn Ala Arg Trp Leu Val Ser Ala Ala His  
 290 295 300  
 Cys Phe Asn Glu Phe Gln Asp Pro Thr Lys Trp Val Ala Tyr Val Gly  
 305 310 315 320  
 Ala Thr Tyr Leu Ser Gly Ser Glu Ala Ser Thr Val Arg Ala Gln Val  
 325 330 335  
 Val Gln Ile Val Lys His Pro Leu Tyr Asn Ala Asp Thr Ala Asp Phe  
 340 345 350  
 Asp Val Ala Val Leu Glu Leu Thr Ser Pro Leu Pro Phe Gly Arg His  
 355 360 365  
 Ile Gln Pro Val Cys Leu Pro Ala Ala Thr His Ile Phe Pro Pro Ser  
 370 375 380  
 Lys Lys Cys Leu Ile Ser Gly Trp Gly Tyr Leu Lys Glu Asp Phe Arg  
 385 390 395 400  
 Lys His Leu Pro Arg Pro Ala Met Val Lys Pro Glu Val Leu Gln Lys  
 405 410 415  
 Ala Thr Val Glu Leu Leu Asp Gln Ala Leu Cys Ala Ser Leu Tyr Gly  
 420 425 430  
 His Ser Leu Thr Asp Arg Met Val Cys Ala Gly Tyr Leu Asp Gly Lys  
 435 440 445  
 Val Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Cys Glu Glu  
 450 455 460  
 Pro Ser Gly Arg Phe Phe Leu Ala Gly Ile Val Ser Trp Gly Ile Gly  
 465 470 475 480  
 Cys Ala Glu Ala Arg Arg Pro Gly Val Tyr Ala Arg Val Thr Arg Leu  
 485 490 495  
 Arg Asp Trp Ile Leu Glu Ala Thr Thr Lys Ala Ser Met Pro Leu Ala  
 500 505 510  
 Pro Thr Met Ala Pro Ala Pro Ala Ala Pro Ser Thr Ala Trp Pro Thr  
 515 520 525

Ser Pro Glu Ser Pro Val Val Ser Thr Pro Thr Lys Ser Met Gln Ala  
 530 535 540  
 Leu Ser Thr Val Pro Leu Asp Trp Val Thr Val Pro Lys Leu Gln Glu  
 545 550 555 560  
 Cys Gly Ala Arg Pro Ala Met Glu Lys Pro Thr Arg Val Val Gly Gly  
 565 570 575  
 Phe Gly Ala Ala Ser Gly Glu Val Pro Trp Gln Val Ser Leu Lys Glu  
 580 585 590  
 Gly Ser Arg His Phe Cys Gly Ala Thr Val Val Gly Asp Arg Trp Leu  
 595 600 605  
 Leu Ser Ala Ala His Cys Phe Asn His Thr Lys Val Glu Gln Val Arg  
 610 615 620  
 Ala His Leu Gly Thr Ala Ser Leu Leu Gly Leu Gly Gly Ser Pro Val  
 625 630 635 640  
 Lys Ile Gly Leu Arg Arg Val Val Leu His Pro Leu Tyr Asn Pro Gly  
 645 650 655  
 Ile Leu Asp Phe Asp Leu Ala Val Leu Glu Leu Ala Ser Pro Leu Ala  
 660 665 670  
 Phe Asn Lys Tyr Ile Gln Pro Val Cys Leu Pro Leu Ala Ile Gln Lys  
 675 680 685  
 Phe Pro Val Gly Arg Lys Cys Met Ile Ser Gly Trp Gly Asn Thr Gln  
 690 695 700  
 Glu Gly Asn Ala Thr Lys Pro Glu Leu Leu Gln Lys Ala Ser Val Gly  
 705 710 715 720  
 Ile Ile Asp Gln Lys Thr Cys Ser Val Leu Tyr Asn Phe Ser Leu Thr  
 725 730 735  
 Asp Arg Met Ile Cys Ala Gly Phe Leu Glu Gly Lys Val Asp Ser Cys  
 740 745 750  
 Gln Gly Asp Ser Gly Gly Pro Leu Ala Cys Glu Glu Ala Pro Gly Val  
 755 760 765  
 Phe Tyr Leu Ala Gly Ile Val Ser Trp Gly Ile Gly Cys Ala Gln Val  
 770 775 780  
 Lys Lys Pro Gly Val Tyr Thr Arg Ile Thr Arg Leu Lys Gly Trp Ile  
 785 790 795 800  
 Leu Glu Ile Met Ser Ser Gln Pro Leu Pro Met Ser Pro Pro Ser Thr  
 805 810 815  
 Thr Arg Met Leu Ala Thr Thr Ser Pro Arg Thr Thr Ala Gly Leu Thr  
 820 825 830

Val Pro Gly Ala Thr Pro Ser Arg Pro Thr Pro Gly Ala Ala Ser Arg  
 835 840 845

Val Thr Gly Gln Pro Ala Asn Ser Thr Leu Ser Ala Val Ser Thr Thr  
 850 855 860

Ala Arg Gly Gln Thr Pro Phe Pro Asp Ala Pro Glu Ala Thr Thr His  
 865 870 875 880

Thr Gln Leu Pro Asp Cys Gly Leu Ala Pro Ala Ala Leu Thr Arg Ile  
 885 890 895

Val Gly Gly Ser Ala Ala Gly Arg Gly Glu Trp Pro Trp Gln Val Ser  
 900 905 910

Leu Trp Leu Arg Arg Arg Glu His Arg Cys Gly Ala Val Leu Val Ala  
 915 920 925

Glu Arg Trp Leu Leu Ser Ala Ala His Cys Phe Asp Val Tyr Gly Asp  
 930 935 940

Pro Lys Gln Trp Ala Ala Phe Leu Gly Thr Pro Phe Leu Ser Gly Ala  
 945 950 955 960

Glu Gly Gln Leu Glu Arg Val Ala Arg Ile Tyr Lys His Pro Phe Tyr  
 965 970 975

Asn Leu Tyr Thr Leu Asp Tyr Asp Val Ala Leu Leu Glu Leu Ala Gly  
 980 985 990

Pro Val Arg Arg Ser Arg Leu Val Arg Pro Ile Cys Leu Pro Glu Pro  
 995 1000 1005

Ala Pro Arg Pro Pro Asp Gly Thr Arg Cys Val Ile Thr Gly Trp Gly  
 1010 1015 1020

Ser Val Arg Glu Gly Gly Ser Met Ala Arg Gln Leu Gln Lys Ala Ala  
 1025 1030 1035 1040

Val Arg Leu Leu Ser Glu Gln Thr Cys Arg Arg Phe Tyr Pro Val Gln  
 1045 1050 1055

Ile Ser Ser Arg Met Leu Cys Ala Gly Phe Pro Gln Gly Gly Val Asp  
 1060 1065 1070

Ser Cys Ser Gly Asp Ala Gly Gly Pro Leu Ala Cys Arg Glu Pro Ser  
 1075 1080 1085

Gly Arg Trp Val Leu Thr Gly Val Thr Ser Trp Gly Tyr Gly Cys Gly  
 1090 1095 1100

Arg Pro His Phe Pro Gly Val Tyr Thr Arg Val Ala Ala Val Arg Gly  
 1105 1110 1115 1120

Trp Ile Gly Gln His Ile Gln Glu  
 1125

&lt;210&gt; 98

&lt;211&gt; 253

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 98

Met	Ala	Arg	Ser	Leu	Leu	Leu	Pro	Leu	Gln	Ile	Leu	Leu	Leu	Ser	Leu
1				5				10						15	

Ala	Leu	Glu	Thr	Ala	Gly	Glu	Glu	Ala	Gln	Gly	Asp	Lys	Ile	Ile	Asp
			20				25						30		

Gly	Ala	Pro	Cys	Ala	Arg	Gly	Ser	His	Pro	Trp	Gln	Val	Ala	Leu	Leu
			35				40						45		

Ser	Gly	Asn	Gln	Leu	His	Cys	Gly	Gly	Val	Leu	Val	Asn	Glu	Arg	Trp
			50				55					60			

Val	Leu	Thr	Ala	Ala	His	Cys	Lys	Met	Asn	Glu	Tyr	Thr	Val	His	Leu
65					70				75				80		

Gly	Ser	Asp	Thr	Leu	Gly	Asp	Arg	Arg	Ala	Gln	Arg	Ile	Lys	Ala	Ser
			85					90				95			

Lys	Ser	Phe	Arg	His	Pro	Gly	Tyr	Ser	Thr	Gln	Thr	His	Val	Asn	Asp
			100				105					110			

Leu	Met	Leu	Val	Lys	Leu	Asn	Ser	Gln	Ala	Arg	Leu	Ser	Ser	Met	Val
115					120						125				

Lys	Lys	Val	Arg	Leu	Pro	Ser	Arg	Cys	Glu	Pro	Pro	Gly	Thr	Thr	Cys
130					135				140						

Thr	Val	Ser	Gly	Trp	Gly	Thr	Thr	Ser	Pro	Asp	Val	Thr	Phe	Pro	
145				150				155				160			

Ser	Asp	Leu	Met	Cys	Val	Asp	Val	Lys	Leu	Ile	Ser	Pro	Gln	Asp	Cys
				165				170				175			

Thr	Lys	Val	Tyr	Lys	Asp	Leu	Leu	Glu	Asn	Ser	Met	Leu	Cys	Ala	Gly
					180			185				190			

Ile	Pro	Asp	Ser	Lys	Lys	Asn	Ala	Cys	Asn	Gly	Asp	Ser	Gly	Gly	Pro
				195				200			205				

Leu	Val	Cys	Arg	Gly	Thr	Leu	Gln	Gly	Leu	Val	Ser	Trp	Gly	Thr	Phe
210					215				220						

Pro	Cys	Gly	Gln	Pro	Asn	Asp	Pro	Gly	Val	Tyr	Thr	Gln	Val	Cys	Lys
225					230				235				240		

Phe	Thr	Lys	Trp	Ile	Asn	Asp	Thr	Met	Lys	Lys	His	Arg			
				245				250							

&lt;210&gt; 99

&lt;211&gt; 272

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 99

Val	Ser	Thr	Val	Cys	Gly	Lys	Pro	Lys	Val	Val	Gly	Lys	Ile	Tyr	Gly
1				5					10				15		

Gly	Arg	Asp	Ala	Ala	Ala	Gly	Gln	Trp	Pro	Trp	Gln	Ala	Ser	Leu	Leu
						20			25				30		

Tyr	Trp	Gly	Ser	His	Leu	Cys	Gly	Ala	Val	Leu	Ile	Asp	Ser	Cys	Trp
				35			40				45				

Leu	Val	Ser	Thr	Thr	His	Cys	Phe	Leu	Asn	Lys	Ser	Gln	Ala	Pro	Lys
					50			55		60					

Asn	Tyr	Gln	Val	Leu	Leu	Gly	Asn	Ile	Gln	Leu	Tyr	His	Gln	Thr	Gln
	65				70				75				80		

His	Thr	Gln	Lys	Met	Ser	Val	His	Arg	Ile	Ile	Thr	His	Pro	Asp	Phe
				85				90			95				

Glu	Lys	Leu	His	Pro	Phe	Gly	Ser	Asp	Ile	Ala	Met	Leu	Gln	Leu	His
				100				105			110				

Leu	Pro	Met	Asn	Phe	Thr	Ser	Tyr	Ile	Val	Pro	Val	Cys	Leu	Pro	Ser
		115					120				125				

Arg	Asp	Met	Gln	Leu	Pro	Ser	Asn	Val	Ser	Cys	Trp	Ile	Thr	Gly	Trp
		130					135			140					

Gly	Met	Leu	Thr	Glu	Asp	His	Lys	Arg	Val	Gln	Leu	Ser	Pro	Pro	Phe
	145				150				155			160			

Tyr	Leu	Gln	Glu	Gly	Lys	Val	Gly	Leu	Ile	Glu	Asn	Thr	Leu	Cys	Asn
					165			170			175				

Thr	Leu	Tyr	Gly	Gln	Arg	Thr	Ala	Lys	Ala	Arg	Pro	Lys	Leu	Cys	Thr
				180				185			190				

Arg	Arg	Cys	Cys	Val	Gly	Gly	Tyr	Phe	Ser	Thr	Gly	Lys	Ser	Ile	Cys
				195				200			205				

Lys	Gly	Asp	Ser	Gly	Gly	Pro	Leu	Val	Cys	Tyr	Leu	Pro	Ser	Ala	Trp
				210		215			220			220			

Val	Leu	Val	Gly	Leu	Ala	Ser	Trp	Gly	Leu	Asp	Cys	Arg	His	Pro	Ala
					225		230		235			240			

Tyr	Pro	Ser	Ile	Phe	Thr	Arg	Val	Thr	Tyr	Phe	Ile	Asn	Trp	Ile	Asp
				245				250			255				

Glu	Ile	Met	Arg	Leu	Thr	Pro	Leu	Ser	Asp	Pro	Ala	Leu	Ala	Pro	His
				260				265			270				

<210> 100  
 <211> 578  
 <212> PRT  
 <213> Homo sapiens

<400> 100  
 Met Leu Leu Ala Val Leu Leu Leu Leu Pro Leu Pro Ser Ser Trp Phe  
 1 5 10 15

Ala His Gly His Pro Leu Tyr Thr Arg Leu Pro Pro Ser Ala Leu Gln  
 20 25 30

Val Phe Thr Leu Leu Leu Gly Ala Glu Thr Val Leu Gly Arg Asn Leu  
 35 40 45

Asp Tyr Val Cys Glu Gly Pro Cys Gly Glu Arg Arg Pro Ser Thr Ala  
 50 55 60

Asn Val Thr Arg Ala His Gly Arg Ile Val Gly Gly Ser Ala Ala Pro  
 65 70 75 80

Pro Gly Ala Trp Pro Trp Leu Val Arg Leu Gln Leu Gly Gly Gln Pro  
 85 90 95

Leu Cys Gly Gly Val Leu Val Ala Ala Ser Trp Val Leu Thr Ala Ala  
 100 105 110

His Cys Phe Val Gly Cys Arg Ser Thr Arg Ser Ala Pro Asn Glu Leu  
 115 120 125

Leu Trp Thr Val Thr Leu Ala Glu Gly Ser Arg Gly Glu Gln Ala Glu  
 130 135 140

Glu Val Pro Val Asn Arg Ile Leu Pro His Pro Lys Phe Asp Pro Arg  
 145 150 155 160

Thr Phe His Asn Asp Leu Ala Leu Val Gln Leu Trp Thr Pro Val Ser  
 165 170 175

Pro Gly Gly Ser Ala Arg Pro Val Cys Leu Pro Gln Glu Pro Gln Glu  
 180 185 190

Pro Pro Ala Gly Thr Ala Cys Ala Ile Ala Gly Trp Gly Ala Leu Phe  
 195 200 205

Glu Asp Gly Pro Glu Ala Glu Ala Val Arg Glu Ala Arg Val Pro Leu  
 210 215 220

Leu Ser Thr Asp Thr Cys Arg Arg Ala Leu Gly Pro Gly Leu Arg Pro  
 225 230 235 240

Ser Thr Met Leu Cys Ala Gly Tyr Leu Ala Gly Gly Val Asp Ser Cys  
 245 250 255

Gln Gly Asp Ser Gly Gly Pro Leu Thr Cys Ser Glu Pro Gly Pro Arg  
 260 265 270

Pro Arg Glu Val Leu Phe Gly Val Thr Ser Trp Gly Asp Gly Cys Gly  
 275 280 285

Glu Pro Gly Lys Pro Gly Val Tyr Thr Arg Val Ala Val Phe Lys Asp  
 290 295 300

Trp Leu Gln Glu Gln Met Ser Ala Ala Ser Ser Ser Arg Glu Pro Ser  
 305 310 315 320

Cys Arg Glu Leu Leu Ala Trp Asp Pro Pro Gln Glu Leu Gln Ala Asp  
 325 330 335

Ala Ala Arg Leu Cys Ala Phe Tyr Ala Arg Leu Cys Pro Gly Ser Gln  
 340 345 350

Gly Ala Cys Ala Arg Leu Ala His Gln Gln Cys Leu Gln Arg Arg Arg  
 355 360 365

Arg Cys Glu Leu Arg Ser Leu Ala His Thr Leu Leu Gly Leu Leu Arg  
 370 375 380

Asn Ala Gln Glu Leu Leu Gly Pro Arg Pro Gly Leu Arg Arg Leu Ala  
 385 390 395 400

Pro Ala Leu Ala Leu Pro Ala Pro Ala Leu Arg Glu Ser Pro Leu His  
 405 410 415

Pro Ala Arg Glu Leu Arg Leu His Ser Gly Ser Arg Ala Ala Gly Thr  
 420 425 430

Arg Phe Pro Lys Arg Arg Pro Glu Pro Arg Gly Glu Ala Asn Gly Cys  
 435 440 445

Pro Gly Leu Glu Pro Leu Arg Gln Lys Leu Ala Ala Leu Gln Gly Ala  
 450 455 460

His Ala Trp Ile Leu Gln Val Pro Ser Glu His Leu Ala Met Asn Phe  
 465 470 475 480

His Glu Val Leu Ala Asp Leu Gly Ser Lys Thr Leu Thr Gly Leu Phe  
 485 490 495

Arg Ala Trp Val Arg Ala Gly Leu Gly Gly Arg His Val Ala Phe Ser  
 500 505 510

Gly Leu Val Gly Leu Glu Pro Ala Thr Leu Ala Arg Ser Leu Pro Arg  
 515 520 525

Leu Leu Val Gln Ala Leu Gln Ala Phe Arg Val Ala Ala Leu Ala Glu  
 530 535 540

Gly Glu Pro Glu Gly Pro Trp Met Asp Val Gly Gln Gly Pro Gly Leu  
 545 550 555 560

Glu Arg Lys Gly His His Pro Leu Asn Pro Gln Val Pro Pro Ala Arg  
 565 570 575

Gln Pro

<210> 101  
 <211> 970  
 <212> PRT  
 <213> Homo sapiens

<400> 101  
 Met Ser Pro Asp Ile Ala Leu Leu Tyr Leu Lys His Lys Val Lys Phe  
 1 5 10 15

Gly Asn Ala Val Gln Pro Ile Cys Leu Pro Asp Ser Asp Asp Lys Val  
 20 25 30

Glu Pro Gly Ile Leu Cys Leu Ser Ser Gly Trp Gly Lys Ile Ser Lys  
 35 40 45

Thr Ser Glu Tyr Ser Asn Val Leu Gln Glu Met Glu Leu Pro Ile Met  
 50 55 60

Asp Asp Arg Ala Cys Asn Thr Val Leu Lys Ser Met Asn Leu Pro Pro  
 65 70 75 80

Leu Gly Arg Thr Met Leu Cys Ala Gly Phe Pro Asp Trp Gly Met Asp  
 85 90 95

Ala Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Cys Arg Arg Gly Gly  
 100 105 110

Gly Ile Trp Ile Leu Ala Gly Ile Thr Ser Trp Val Ala Gly Cys Ala  
 115 120 125

Gly Gly Ser Val Pro Val Arg Asn Asn His Val Lys Ala Ser Leu Gly  
 130 135 140

Ile Phe Ser Lys Val Ser Glu Leu Met Asp Phe Ile Thr Gln Asn Leu  
 145 150 155 160

Phe Thr Gly Leu Asp Arg Gly Gln Pro Leu Ser Lys Val Gly Ser Arg  
 165 170 175

Tyr Ile Thr Lys Ala Leu Ser Ser Val Gln Glu Val Asn Gly Ser Gln  
 180 185 190

Arg Asp Lys Ile Ile Leu Ile Lys Phe Thr Ser Leu Asp Met Glu Lys  
 195 200 205

Gln Val Gly Cys Asp His Asp Tyr Val Ser Leu Arg Ser Ser Ser Gly  
 210 215 220

Val Leu Phe Ser Lys Val Cys Gly Lys Ile Leu Pro Ser Pro Leu Leu  
 225 230 235 240

Ala Glu Thr Ser Glu Ala Met Val Pro Phe Val Ser Asp Thr Glu Asp  
 245 250 255

Ser Gly Ser Gly Phe Glu Leu Thr Val Thr Ala Val Gln Lys Ser Glu  
 260 265 270

Ala Gly Ser Gly Cys Gly Ser Leu Ala Ile Leu Val Glu Glu Gly Thr  
 275 280 285

Asn His Ser Ala Lys Tyr Pro Asp Leu Tyr Pro Ser Asn Thr Arg Cys  
 290 295 300

His Trp Phe Ile Cys Ala Pro Glu Lys His Ile Ile Lys Leu Thr Phe  
 305 310 315 320

Glu Asp Phe Ala Val Lys Phe Ser Pro Asn Cys Ile Tyr Asp Ala Val  
 325 330 335

Val Ile Tyr Gly Asp Ser Glu Glu Lys His Lys Leu Ala Lys Leu Cys  
 340 345 350

Gly Met Leu Thr Ile Thr Ser Ile Phe Ser Ser Ser Asn Met Thr Val  
 355 360 365

Ile Tyr Phe Lys Ser Asp Gly Lys Asn Arg Leu Gln Gly Phe Lys Ala  
 370 375 380

Arg Phe Thr Ile Leu Pro Ser Glu Ser Leu Asn Lys Phe Glu Pro Lys  
 385 390 395 400

Leu Pro Pro Gln Asn Asn Pro Val Ser Thr Val Lys Ala Ile Leu His  
 405 410 415

Asp Val Cys Gly Ile Pro Pro Phe Ser Pro Gln Trp Leu Ser Arg Arg  
 420 425 430

Ile Ala Gly Gly Glu Glu Ala Cys Pro His Cys Trp Pro Trp Gln Val  
 435 440 445

Gly Leu Arg Phe Leu Gly Asp Tyr Gln Cys Gly Gly Ala Ile Ile Asn  
 450 455 460

Pro Val Trp Ile Leu Thr Ala Ala His Cys Val Gln Leu Lys Asn Asn  
 465 470 475 480

Pro Leu Ser Trp Thr Ile Ile Ala Gly Asp His Asp Arg Asn Leu Lys  
 485 490 495

Glu Ser Thr Glu Gln Val Arg Arg Ala Lys His Ile Ile Val His Glu  
 500 505 510

Asp Phe Asn Thr Leu Ser Tyr Asp Ser Asp Ile Ala Leu Ile Gln Leu  
 515 520 525

Ser Ser Pro Leu Glu Tyr Asn Ser Val Val Arg Pro Val Cys Leu Pro  
 530 535 540

His Ser Ala Glu Pro Leu Phe Ser Ser Glu Ile Cys Ala Val Thr Gly  
 545 550 555 560

Trp Gly Ser Ile Ser Ala Glu Leu Ser Leu Asn Val Ser Ser Leu Asp  
 565 570 575

Gly Gly Leu Ala Ser Arg Leu Gln Gln Ile Gln Val His Val Leu Glu  
 580 585 590

Arg Glu Val Cys Glu His Thr Tyr Tyr Ser Ala His Pro Gly Gly Ile  
 595 600 605

Thr Glu Lys Met Ile Cys Ala Gly Phe Ala Ala Ser Gly Glu Lys Asp  
 610 615 620

Phe Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Cys Arg His Glu Asn  
 625 630 635 640

Gly Pro Phe Val Leu Tyr Gly Ile Val Ser Trp Gly Ala Gly Cys Val  
 645 650 655

Gln Pro Trp Lys Pro Gly Val Phe Ala Arg Val Met Ile Phe Leu Asp  
 660 665 670

Trp Ile Gln Ser Lys Ile Asn Gly Lys Leu Phe Ser Asn Val Ile Lys  
 675 680 685

Thr Ile Thr Ser Phe Phe Arg Val Gly Leu Gly Thr Val Ser Cys Cys  
 690 695 700

Ser Glu Ala Glu Leu Glu Lys Pro Arg Gly Phe Phe Pro Thr Pro Arg  
 705 710 715 720

Tyr Leu Leu Asp Tyr Arg Gly Arg Leu Glu Cys Ser Trp Val Leu Arg  
 725 730 735

Val Ser Ala Ser Ser Met Ala Lys Phe Thr Ile Glu Tyr Leu Ser Leu  
 740 745 750

Leu Gly Ser Pro Val Cys Gln Asp Ser Val Leu Ile Ile Tyr Glu Glu  
 755 760 765

Arg His Ser Lys Arg Lys Thr Ala Gly Gly Leu His Gly Arg Arg Leu  
 770 775 780

Tyr Ser Met Thr Phe Met Ser Pro Gly Pro Leu Val Arg Val Thr Phe  
 785 790 795 800

His Ala Leu Val Arg Gly Ala Phe Gly Ile Ser Tyr Ile Val Leu Lys  
 805 810 815

Val Leu Gly Pro Lys Asp Ser Lys Ile Thr Arg Leu Ser Gln Ser Ser  
 820 825 830

Asn Arg Glu His Leu Val Pro Cys Glu Asp Val Leu Leu Thr Lys Pro  
 835 840 845

Glu Gly Ile Met Gln Ile Pro Arg Asn Ser His Arg Thr Thr Met Gly  
 850 855 860

Cys Gln Trp Arg Leu Val Ala Pro Leu Asn His Ile Ile Gln Leu Asn  
 865 870 875 880

Ile Ile Asn Phe Pro Met Lys Pro Thr Thr Phe Val Cys His Gly His  
 885 890 895

Leu Arg Val Tyr Glu Gly Phe Gly Pro Gly Lys Lys Leu Ile Gly Arg  
 900 905 910

Met Leu Met Ser Thr Glu Leu Ser Trp Phe Leu Ser Gln Phe Ser Thr  
 915 920 925

Lys Lys Thr Thr Ala Ser Cys Gly Glu Thr Ala Val Ser Met Lys Met  
 930 935 940

Met Tyr Thr Ser Ile Phe Leu Ala Leu Gln Asn Thr Cys Tyr His Ala  
 945 950 955 960

Leu Pro His Glu Val Val Leu Arg Ile Lys  
 965 970

&lt;210&gt; 102

&lt;211&gt; 265

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 102

Met Lys Tyr Val Phe Tyr Leu Gly Val Leu Ala Gly Thr Phe Phe Phe  
 1 5 10 15

Ala Asp Ser Ser Val Gln Lys Glu Asp Pro Ala Pro Tyr Leu Val Tyr  
 20 25 30

Leu Lys Ser His Phe Asn Pro Cys Val Gly Val Leu Ile Lys Pro Ser  
 35 40 45

Trp Val Leu Ala Pro Ala His Cys Tyr Leu Pro Asn Leu Lys Val Met  
 50 55 60

Leu Gly Asn Phe Lys Ser Arg Val Arg Asp Gly Thr Glu Gln Thr Ile  
 65 70 75 80

Asn Pro Ile Gln Ile Val Arg Tyr Trp Asn Tyr Ser His Ser Ala Pro  
 85 90 95

Gln Asp Asp Leu Met Leu Ile Lys Leu Ala Lys Pro Ala Met Leu Asn  
 100 105 110

Pro Lys Val Gln Pro Leu Thr Leu Ala Thr Thr Asn Val Arg Pro Gly  
 115 120 125

Thr Val Cys Leu Leu Ser Gly Leu Asp Trp Ser Gln Glu Asn Ser Gly  
 130 135 140

Leu Trp Gln Leu Glu Pro Pro Gly His Leu Thr Leu His Arg Gly Pro  
 145 150 155 160

Ala Ile Pro Asp Trp Gln Arg His Asn Ser His Glu Gln Gly Arg His  
 165 170 175

Pro Asp Leu Arg Gln Asn Leu Glu Ala Pro Val Met Ser Asp Arg Glu  
 180 185 190

Cys Gln Lys Thr Glu Gln Gly Lys Ser His Arg Asn Ser Leu Cys Val  
 195 200 205

Lys Phe Val Lys Val Phe Ser Arg Ile Phe Gly Glu Val Ala Val Ala  
 210 215 220

Thr Val Ile Cys Lys Asp Lys Leu Gln Gly Ile Glu Val Gly His Phe  
 225 230 235 240

Met Gly Gly Asp Val Gly Ile Tyr Thr Asn Val Tyr Lys Tyr Val Ser  
 245 250 255

Trp Ile Glu Asn Thr Ala Lys Asp Lys  
 260 265

<210> 103

<211> 454

<212> PRT

<213> Homo sapiens

<400> 103

Met Gly Glu Asn Asp Pro Pro Ala Val Glu Ala Pro Phe Ser Phe Arg  
 1 5 10 15

Ser Leu Phe Gly Leu Asp Asp Leu Lys Ile Ser Pro Val Ala Pro Asp  
 20 25 30

Ala Asp Ala Val Ala Ala Gln Ile Leu Ser Leu Leu Pro Leu Lys Phe  
 35 40 45

Phe Pro Ile Ile Val Ile Gly Ile Ile Ala Leu Ile Leu Ala Leu Ala  
 50 55 60

Ile Gly Leu Gly Ile His Phe Asp Cys Ser Gly Lys Tyr Arg Cys Arg  
 65 70 75 80

Ser Ser Phe Lys Cys Ile Glu Leu Ile Ala Arg Cys Asp Gly Val Ser  
 85 90 95

Asp Cys Lys Asp Gly Glu Asp Glu Tyr Arg Cys Val Arg Val Gly Gly  
 100 105 110

Gln Asn Ala Val Leu Gln Val Phe Thr Ala Ala Ser Trp Lys Thr Met  
 115 120 125

Cys Ser Asp Asp Trp Lys Gly His Tyr Ala Asn Val Ala Cys Ala Gln  
 130 135 140

Leu Gly Phe Pro Ser Tyr Val Ser Ser Asp Asn Leu Arg Val Ser Ser  
 145 150 155 160

Leu Glu Gly Gln Phe Arg Glu Glu Phe Val Ser Ile Asp His Leu Leu  
 165 170 175

Pro Asp Asp Lys Val Thr Ala Leu His His Ser Val Tyr Val Arg Glu  
 180 185 190

Gly Cys Ala Ser Gly His Val Val Thr Leu Gln Cys Thr Ala Cys Gly  
 195 200 205

His Arg Arg Gly Tyr Ser Ser Arg Ile Val Gly Gly Asn Met Ser Leu  
 210 215 220

Leu Ser Gln Trp Pro Trp Gln Ala Ser Leu Gln Phe Gln Gly Tyr His  
 225 230 235 240

Leu Cys Gly Gly Ser Val Ile Thr Pro Leu Trp Ile Ile Thr Ala Ala  
 245 250 255

His Cys Val Tyr Asp Leu Tyr Leu Pro Lys Ser Trp Thr Ile Gln Val  
 260 265 270

Gly Leu Val Ser Leu Leu Asp Asn Pro Ala Pro Ser His Leu Val Glu  
 275 280 285

Lys Ile Val Tyr His Ser Lys Tyr Lys Pro Lys Arg Leu Gly Asn Asp  
 290 295 300

Ile Ala Leu Met Lys Leu Ala Gly Pro Leu Thr Phe Asn Glu Met Ile  
 305 310 315 320

Gln Pro Val Cys Leu Pro Asn Ser Glu Glu Asn Phe Pro Asp Gly Lys  
 325 330 335

Val Cys Trp Thr Ser Gly Trp Gly Ala Thr Glu Asp Gly Ala Gly Asp  
 340 345 350

Ala Ser Pro Val Leu Asn His Ala Ala Val Pro Leu Ile Ser Asn Lys  
 355 360 365

Ile Cys Asn His Arg Asp Val Tyr Gly Gly Ile Ile Ser Pro Ser Met  
 370 375 380

Leu Cys Ala Gly Tyr Leu Thr Gly Gly Val Asp Ser Cys Gln Gly Asp  
 385 390 395 400

Ser Gly Gly Pro Leu Val Cys Gln Glu Arg Arg Leu Trp Lys Leu Val  
 405 410 415

Gly Ala Thr Ser Phe Gly Ile Gly Cys Ala Glu Val Asn Lys Pro Gly  
 420 425 430

Val Tyr Thr Arg Val Thr Ser Phe Leu Asp Trp Ile His Glu Gln Met  
 435 440 445

Glu Arg Asp Leu Lys Thr  
 450

<210> 104  
 <211> 537  
 <212> PRT  
 <213> Homo sapiens

<400> 104  
 Met Glu Arg Asp Ser His Gly Asn Ala Ser Pro Ala Arg Thr Pro Ser  
 1 5 10 15  
 Ala Gly Ala Ser Pro Ala Gln Ala Ser Pro Ala Gly Thr Pro Pro Gly  
 20 25 30  
 Arg Ala Ser Pro Ala Gln Ala Ser Pro Ala Gln Ala Ser Pro Ala Gly  
 35 40 45  
 Thr Pro Pro Gly Arg Ala Ser Pro Ala Gln Ala Ser Pro Ala Gly Thr  
 50 55 60  
 Pro Pro Gly Arg Ala Ser Pro Gly Arg Ala Ser Pro Ala Gln Ala Ser  
 65 70 75 80  
 Pro Ala Gln Ala Ser Pro Ala Gln Ala Ser Pro Ala Arg Ala Ser Pro  
 85 90 95  
 Ala Leu Ala Ser Leu Ser Arg Ser Ser Ser Gly Arg Ser Ser Ala  
 100 105 110  
 Arg Ser Ala Ser Val Thr Thr Ser Pro Thr Arg Val Tyr Leu Val Arg  
 115 120 125  
 Ala Thr Pro Val Gly Ala Val Pro Ile Arg Ser Ser Pro Ala Arg Ser  
 130 135 140  
 Ala Pro Ala Thr Arg Ala Thr Arg Glu Ser Pro Val Gln Phe Trp Gln  
 145 150 155 160  
 Gly His Thr Gly Ile Arg Tyr Lys Glu Gln Arg Glu Ser Cys Pro Lys  
 165 170 175  
 His Ala Val Arg Cys Asp Gly Val Val Asp Cys Lys Leu Lys Ser Asp  
 180 185 190  
 Glu Leu Gly Cys Val Arg Phe Asp Trp Asp Lys Ser Leu Leu Lys Ile  
 195 200 205  
 Tyr Ser Gly Ser Ser His Gln Trp Leu Pro Ile Cys Ser Ser Asn Trp  
 210 215 220  
 Asn Asp Ser Tyr Ser Glu Lys Thr Cys Gln Gln Leu Gly Phe Glu Ser  
 225 230 235 240  
 Ala His Arg Thr Thr Glu Val Ala His Arg Asp Phe Ala Asn Ser Phe  
 245 250 255  
 Ser Ile Leu Arg Tyr Asn Ser Thr Ile Gln Glu Ser Leu His Arg Ser  
 260 265 270

Glu Cys Pro Ser Gln Arg Tyr Ile Ser Leu Gln Cys Ser His Cys Gly  
 275 280 285

Leu Arg Ala Met Thr Gly Arg Ile Val Gly Gly Ala Leu Ala Ser Asp  
 290 295 300

Ser Lys Trp Pro Trp Gln Val Ser Leu His Phe Gly Thr Thr His Ile  
 305 310 315 320

Cys Gly Gly Thr Leu Ile Asp Ala Gln Trp Val Leu Thr Ala Ala His  
 325 330 335

Cys Phe Phe Val Thr Arg Glu Lys Val Leu Glu Gly Trp Lys Val Tyr  
 340 345 350

Ala Gly Thr Ser Asn Leu His Gln Leu Pro Glu Ala Ala Ser Ile Ala  
 355 360 365

Glu Ile Ile Ile Asn Ser Asn Tyr Thr Asp Glu Glu Asp Asp Tyr Asp  
 370 375 380

Ile Ala Leu Met Arg Leu Ser Lys Pro Leu Thr Leu Ser Ala His Ile  
 385 390 395 400

His Pro Ala Cys Leu Pro Met His Gly Gln Thr Phe Ser Leu Asn Glu  
 405 410 415

Thr Cys Trp Ile Thr Gly Phe Gly Lys Thr Arg Glu Thr Asp Asp Lys  
 420 425 430

Thr Ser Pro Phe Leu Arg Glu Val Gln Val Asn Leu Ile Asp Phe Lys  
 435 440 445

Lys Cys Asn Asp Tyr Leu Val Tyr Asp Ser Tyr Leu Thr Pro Arg Met  
 450 455 460

Met Cys Ala Gly Asp Leu Arg Gly Arg Asp Ser Cys Gln Gly Asp  
 465 470 475 480

Ser Gly Gly Pro Leu Val Cys Glu Gln Asn Asn Arg Trp Tyr Leu Ala  
 485 490 495

Gly Val Thr Ser Trp Gly Thr Gly Cys Gly Gln Arg Asn Lys Pro Gly  
 500 505 510

Val Tyr Thr Lys Val Thr Glu Val Leu Pro Trp Ile Tyr Ser Lys Met  
 515 520 525

Glu Ser Glu Val Arg Phe Arg Lys Ser  
 530 535

<210> 105  
 <211> 326  
 <212> PRT  
 <213> Homo sapiens

<400> 105  
 Met Ala Ala Pro Ala Ser Val Met Gly Pro Leu Gly Pro Ser Ala Leu  
 1 5 10 15  
  
 Gly Leu Leu Leu Leu Leu Val Val Ala Pro Pro Arg Val Ala Ala  
 20 25 30  
  
 Leu Val His Arg Gln Pro Glu Asn Gln Gly Ile Ser Leu Thr Gly Ser  
 35 40 45  
  
 Val Ala Cys Gly Arg Pro Ser Met Glu Gly Lys Ile Leu Gly Gly Val  
 50 55 60  
  
 Pro Ala Pro Glu Arg Lys Trp Pro Trp Gln Val Ser Val His Tyr Ala  
 65 70 75 80  
  
 Gly Leu His Val Cys Gly Gly Ser Ile Leu Asn Glu Tyr Trp Val Leu  
 85 90 95  
  
 Ser Ala Ala His Cys Phe His Arg Asp Lys Asn Ile Lys Ile Tyr Asp  
 100 105 110  
  
 Met Tyr Val Gly Leu Val Asn Leu Arg Val Ala Gly Asn His Thr Gln  
 115 120 125  
  
 Trp Tyr Glu Val Asn Arg Val Ile Leu His Pro Thr Tyr Glu Met Tyr  
 130 135 140  
  
 His Pro Ile Gly Gly Asp Val Ala Leu Val Gln Leu Lys Thr Arg Ile  
 145 150 155 160  
  
 Val Phe Ser Glu Ser Val Leu Pro Val Cys Leu Ala Thr Pro Glu Val  
 165 170 175  
  
 Asn Leu Thr Ser Ala Asn Cys Trp Ala Thr Gly Trp Gly Leu Val Ser  
 180 185 190  
  
 Lys Gln Gly Glu Thr Ser Asp Glu Leu Gln Glu Val Gln Leu Pro Leu  
 195 200 205  
  
 Ile Leu Glu Pro Trp Cys His Leu Leu Tyr Gly His Met Ser Tyr Ile  
 210 215 220  
  
 Met Pro Asp Met Leu Cys Ala Gly Asp Ile Leu Asn Ala Lys Thr Val  
 225 230 235 240  
  
 Cys Glu Gly Asp Ser Gly Gly Pro Leu Val Cys Glu Phe Asn Arg Ser  
 245 250 255  
  
 Trp Leu Gln Ile Gly Ile Val Ser Trp Gly Arg Gly Cys Ser Asn Pro  
 260 265 270  
  
 Leu Tyr Pro Gly Val Tyr Ala Ser Val Ser Tyr Phe Ser Lys Trp Ile  
 275 280 285  
  
 Cys Asp Asn Ile Glu Ile Thr Pro Thr Pro Ala Gln Pro Ala Pro Ala  
 290 295 300

Leu Ser Pro Ala Leu Gly Pro Thr Leu Ser Val Leu Met Ala Met Leu  
 305 310 315 320

Ala Gly Trp Ser Val Leu  
 325

<210> 106  
 <211> 556  
 <212> PRT  
 <213> Homo sapiens

<400> 106  
 Met Ser Leu Lys Met Leu Ile Ser Arg Asn Lys Leu Ile Leu Leu Leu  
 1 5 10 15

Gly Ile Val Phe Phe Glu Arg Gly Lys Ser Ala Thr Leu Ser Leu Pro  
 20 25 30

Lys Ala Pro Ser Cys Gly Gln Ser Leu Val Lys Val Gln Pro Trp Asn  
 35 40 45

Tyr Phe Asn Ile Phe Ser Arg Ile Leu Gly Gly Ser Gln Val Glu Lys  
 50 55 60

Gly Ser Tyr Pro Trp Gln Val Ser Leu Lys Gln Arg Gln Lys His Ile  
 65 70 75 80

Cys Gly Gly Ser Ile Val Ser Pro Gln Trp Val Ile Thr Ala Ala His  
 85 90 95

Cys Ile Ala Asn Arg Asn Ile Val Ser Thr Leu Asn Val Thr Ala Gly  
 100 105 110

Glu Tyr Asp Leu Ser Gln Thr Asp Pro Gly Glu Gln Thr Leu Thr Ile  
 115 120 125

Glu Thr Val Ile Ile His Pro His Phe Ser Thr Lys Lys Pro Met Asp  
 130 135 140

Tyr Asp Ile Ala Leu Leu Lys Met Ala Gly Ala Phe Gln Phe Gly His  
 145 150 155 160

Phe Val Gly Pro Ile Cys Leu Pro Glu Leu Arg Glu Gln Phe Glu Ala  
 165 170 175

Gly Phe Ile Cys Thr Thr Ala Gly Trp Gly Arg Leu Thr Glu Gly Gly  
 180 185 190

Val Leu Ser Gln Val Leu Gln Glu Val Asn Leu Pro Ile Leu Thr Trp  
 195 200 205

Glu Glu Cys Val Ala Ala Leu Leu Thr Leu Lys Arg Pro Ile Ser Gly  
 210 215 220

Lys Thr Phe Leu Cys Thr Gly Phe Pro Asp Gly Gly Arg Asp Ala Cys  
 225 230 235 240

Gln Gly Asp Ser Gly Gly Ser Leu Met Cys Arg Asn Lys Lys Gly Ala  
 245 250 255

Trp Asp Ser Gly Trp Ser Ile Trp Glu Ala Gln Val Gly Gly Ser Leu  
 260 265 270

Glu Ser Arg Ser Ser Arg Pro Ser Leu Gly Asn Lys Val Arg Leu Cys  
 275 280 285

Leu Thr Asn Asn Phe Phe Lys Lys Leu Ala Gly Cys Gly Thr Trp Cys  
 290 295 300

Ser Glu Gln Asp Val Ile Val Ser Gly Ala Glu Gly Lys Leu His Phe  
 305 310 315 320

Pro Glu Ser Leu His Leu Tyr Tyr Glu Ser Lys Gln Arg Cys Val Trp  
 325 330 335

Thr Leu Leu Val Pro Glu Glu Met His Val Leu Leu Ser Phe Ser His  
 340 345 350

Leu Asp Val Glu Ser Cys His His Ser Tyr Leu Ser Met Tyr Ser Leu  
 355 360 365

Glu Asp Arg Pro Ile Gly Lys Phe Cys Gly Glu Ser Leu Pro Ser Ser  
 370 375 380

Ile Leu Ile Gly Ser Asn Ser Leu Arg Leu Lys Phe Val Ser Asp Ala  
 385 390 395 400

Thr Asp Tyr Ala Ala Gly Phe Asn Leu Thr Tyr Lys Ala Leu Lys Pro  
 405 410 415

Asn Tyr Ile Pro Gly Cys Ser Tyr Leu Thr Val Leu Phe Glu Glu Gly  
 420 425 430

Leu Ile Gln Ser Leu Asn Tyr Pro Glu Asn Tyr Ser Asp Lys Ala Asn  
 435 440 445

Cys Asp Trp Ile Phe Gln Ala Ser Lys His His Leu Ile Lys Leu Ser  
 450 455 460

Phe Gln Ser Leu Glu Ile Glu Glu Ser Gly Asp Cys Thr Ser Asp Tyr  
 465 470 475 480

Val Thr Val His Ser Asp Val Glu Arg Lys Lys Glu Ile Ala Arg Leu  
 485 490 495

Cys Gly Tyr Asp Val Pro Thr Pro Val Leu Ser Pro Ser Ser Ile Met  
 500 505 510

Leu Ile Ser Phe His Ser Asp Glu Asn Gly Thr Cys Arg Gly Phe Gln  
 515 520 525

Ala Ile Val Ser Phe Ile Pro Lys Ala Val Tyr Pro Asp Leu Asn Ile  
 530 535 540

Ser Ile Ser Glu Asp Glu Ser Met Phe Leu Glu Thr  
 545 550 555

<210> 107  
 <211> 298  
 <212> PRT  
 <213> Homo sapiens

<400> 107  
 Arg Trp Pro Trp Gln Ala Ser Leu Leu Tyr Leu Gly Gly His Ile Cys  
 1 5 10 15

Gly Ala Ala Leu Ile Asp Ser Asn Trp Val Ala Ser Ala Ala His Cys  
 20 25 30

Phe Gln Arg Cys Ile Phe Pro Pro Arg Ala Pro Leu Ser Thr Asn Pro  
 35 40 45

Ser Asp Tyr Arg Ile Leu Leu Gly Tyr Asp Gln Gln Ser His Pro Thr  
 50 55 60

Glu His Ser Lys Gln Met Thr Val Asn Lys Ile Met Val His Ala Asp  
 65 70 75 80

Tyr Asn Glu Leu His Arg Met Gly Ser Asp Ile Thr Leu Leu Gln Leu  
 85 90 95

His His His Val Glu Phe Ser Ser His Ile Leu Pro Ala Cys Leu Pro  
 100 105 110

Glu Pro Thr Thr Trp Leu Ala Pro Asp Ser Ser Cys Trp Ile Ser Gly  
 115 120 125

Trp Gly Met Val Thr Glu Asp Val Phe Leu Pro Glu Pro Phe Gln Leu  
 130 135 140

Gln Glu Ala Glu Val Gly Val Met Asp Asn Thr Val Cys Gly Ser Phe  
 145 150 155 160

Phe Gln Pro Gln Tyr Pro Gly Gln Pro Ser Ser Ser Asp Tyr Thr Ile  
 165 170 175

His Glu Asp Met Leu Cys Ala Gly Asp Leu Ile Thr Gly Lys Ala Ile  
 180 185 190

Cys Arg Val Asn Ser Arg Gly Pro Leu Val Cys Pro Leu Asn Gly Thr  
 195 200 205

Trp Phe Leu Met Gly Leu Ser Ser Trp Ser Leu Asp Cys Cys Ser Pro  
 210 215 220

Val Gly Pro Arg Val Phe Thr Arg Leu Pro Tyr Phe Thr Asn Trp Ile  
 225 230 235 240

Ser Gln Lys Lys Arg Glu Ser Thr Pro Pro Asp Pro Ala Leu Ala Pro  
 245 250 255

Pro Gln Glu Thr Pro Pro Ala Leu Asp Ser Met Thr Ser Gln Gly Ile  
 260 265 270  
 Val His Lys Pro Gly Leu Cys Ala Ala Leu Leu Ala Ala His Met Phe  
 275 280 285  
 Leu Leu Leu Leu Ile Leu Leu Gly Ser Leu  
 290 295

<210> 108  
 <211> 850  
 <212> PRT  
 <213> Homo sapiens

<400> 108  
 Met Asp Lys Glu Asn Ser Asp Val Ser Ala Ala Pro Ala Asp Leu Lys  
 1 5 10 15

Ile Ser Asn Ile Ser Val Gln Val Val Ser Ala Gln Lys Lys Leu Pro  
 20 25 30

Val Arg Arg Pro Pro Leu Pro Gly Arg Arg Leu Pro Leu Pro Gly Arg  
 35 40 45

Arg Pro Pro Gln Arg Pro Ile Gly Lys Ala Lys Pro Lys Lys Gln Ser  
 50 55 60

Lys Lys Lys Val Pro Phe Trp Asn Val Gln Asn Lys Ile Ile Leu Phe  
 65 70 75 80

Thr Val Phe Leu Phe Ile Leu Ala Val Ile Ala Trp Thr Leu Leu Trp  
 85 90 95

Leu Tyr Ile Ser Lys Thr Glu Ser Lys Asp Ala Phe Tyr Phe Ala Gly  
 100 105 110

Met Phe Arg Ile Thr Asn Ile Glu Phe Leu Pro Glu Tyr Arg Gln Lys  
 115 120 125

Glu Ser Arg Glu Phe Leu Ser Val Ser Arg Thr Val Gln Gln Val Ile  
 130 135 140

Asn Leu Val Tyr Thr Thr Ser Ala Phe Ser Lys Phe Tyr Glu Gln Ser  
 145 150 155 160

Val Val Ala Asp Val Ser Ser Asn Asn Lys Gly Gly Leu Leu Val His  
 165 170 175

Phe Trp Ile Val Phe Val Met Pro Arg Ala Lys Gly His Ile Phe Cys  
 180 185 190

Glu Asp Cys Val Ala Ala Ile Leu Lys Asp Ser Ile Gln Thr Ser Ile  
 195 200 205

Ile Asn Arg Thr Ser Val Gly Ser Leu Gln Gly Leu Ala Val Asp Met  
 210 215 220

Asp Ser Val Val Leu Asn Gly Asp Cys Trp Ser Phe Leu Lys Lys Lys  
 225 230 235 240

Lys Arg Lys Glu Asn Gly Ala Val Ser Thr Asp Lys Gly Cys Ser Gln  
 245 250 255

Tyr Phe Tyr Ala Glu His Leu Ser Leu His Tyr Pro Leu Glu Ile Ser  
 260 265 270

Ala Ala Ser Gly Arg Leu Met Cys His Phe Lys Leu Val Ala Ile Val  
 275 280 285

Gly Tyr Leu Ile Arg Leu Ser Ile Lys Ser Ile Gln Ile Glu Ala Asp  
 290 295 300

Asn Cys Val Thr Asp Ser Leu Thr Ile Tyr Asp Ser Leu Leu Pro Ile  
 305 310 315 320

Arg Ser Ser Ile Leu Tyr Arg Ile Cys Glu Pro Thr Arg Thr Leu Met  
 325 330 335

Ser Phe Val Ser Thr Asn Asn Leu Met Leu Val Thr Phe Lys Ser Pro  
 340 345 350

His Ile Arg Arg Leu Ser Gly Ile Arg Ala Tyr Phe Glu Val Ile Pro  
 355 360 365

Glu Gln Lys Cys Glu Asn Thr Val Leu Val Lys Asp Ile Thr Gly Phe  
 370 375 380

Glu Gly Lys Ile Ser Ser Pro Tyr Tyr Pro Ser Tyr Tyr Pro Pro Lys  
 385 390 395 400

Cys Lys Cys Thr Trp Lys Phe Gln Thr Ser Leu Ser Thr Leu Gly Ile  
 405 410 415

Ala Leu Lys Phe Tyr Asn Tyr Ser Ile Thr Lys Lys Ser Met Lys Gly  
 420 425 430

Cys Glu His Gly Trp Trp Glu Ile Asn Glu His Met Tyr Cys Gly Ser  
 435 440 445

Tyr Met Asp His Gln Thr Ile Phe Arg Val Pro Ser Pro Leu Val His  
 450 455 460

Ile Gln Leu Gln Cys Ser Ser Arg Leu Ser Asp Lys Pro Leu Leu Ala  
 465 470 475 480

Glu Tyr Gly Ser Tyr Asn Ile Ser Gln Pro Cys Pro Val Gly Ser Phe  
 485 490 495

Arg Cys Ser Ser Gly Leu Cys Val Pro Gln Ala Gln Arg Cys Asp Gly  
 500 505 510

Val Asn Asp Cys Phe Asp Glu Ser Asp Glu Leu Phe Cys Val Ser Pro  
 515 520 525

Gln Pro Ala Cys Asn Thr Ser Ser Phe Arg Gln His Gly Pro Leu Ile  
 530 535 540  
 Cys Asp Gly Phe Arg Asp Cys Glu Asn Gly Arg Asp Glu Gln Asn Cys  
 545 550 555 560  
 Thr Gln Ser Ile Pro Cys Asn Asn Arg Thr Phe Lys Cys Gly Asn Asp  
 565 570 575  
 Ile Cys Phe Arg Lys Gln Asn Ala Lys Cys Asp Gly Thr Val Asp Cys  
 580 585 590  
 Pro Asp Gly Ser Asp Glu Glu Gly Cys Thr Cys Ser Arg Ser Ser Ser  
 595 600 605  
 Ala Leu His Arg Ile Ile Gly Gly Thr Asp Thr Leu Glu Gly Gly Trp  
 610 615 620  
 Pro Trp Gln Val Ser Leu His Phe Val Gly Ser Ala Tyr Cys Gly Ala  
 625 630 635 640  
 Ser Val Ile Ser Arg Glu Trp Leu Leu Ser Ala Ala His Cys Phe His  
 645 650 655  
 Gly Asn Arg Leu Ser Asp Pro Thr Pro Trp Thr Ala His Leu Gly Met  
 660 665 670  
 Tyr Val Gln Gly Asn Ala Lys Phe Val Ser Pro Val Arg Arg Ile Val  
 675 680 685  
 Val His Glu Tyr Tyr Asn Ser Gln Thr Phe Asp Tyr Asp Ile Ala Leu  
 690 695 700  
 Leu Gln Leu Ser Ile Ala Trp Pro Glu Thr Leu Lys Gln Leu Ile Gln  
 705 710 715 720  
 Pro Ile Cys Ile Pro Pro Thr Gly Gln Arg Val Arg Ser Gly Glu Lys  
 725 730 735  
 Cys Trp Val Thr Gly Trp Gly Arg Arg His Glu Ala Asp Asn Lys Gly  
 740 745 750  
 Ser Leu Val Leu Gln Gln Ala Glu Val Glu Leu Ile Asp Gln Thr Leu  
 755 760 765  
 Cys Val Ser Thr Tyr Gly Ile Ile Thr Ser Arg Met Leu Cys Ala Gly  
 770 775 780  
 Ile Met Ser Gly Lys Arg Asp Ala Cys Lys Gly Asp Ser Gly Gly Pro  
 785 790 795 800  
 Leu Ser Cys Arg Arg Lys Ser Asp Gly Lys Trp Ile Leu Thr Gly Ile  
 805 810 815  
 Val Ser Trp Gly His Gly Cys Gly Arg Pro Asn Phe Pro Gly Val Tyr  
 820 825 830

Thr Arg Val Ser Asn Phe Val Pro Trp Ile His Lys Tyr Val Pro Ser  
 835 840 845

Leu Leu  
850

<210> 109  
<211> 447  
<212> PRT  
<213> *Homo sapiens*

<400> 109  
Met Thr Leu Asn Lys Ile Lys Asp Leu Phe Ala Gly Lys Gly Gln Trp  
1 5 10 15

Asp Leu Ala Pro Glu Ala Glu Met Leu Lys Pro Trp Met Ile Ala Val  
20 25 30

Leu Ile Val Leu Ser Leu Thr Val Val Ala Val Thr Ile Gly Leu Leu  
35 40 45

Val His Phe Leu Val Phe Asp Gln Lys Lys Glu Tyr Tyr His Gly Ser  
50 55 60

Phe Lys Ile Leu Asp Pro Gln Ile Asn Asn Asn Phe Gly Gln Ser Asn  
 65 70 75 80

Thr Tyr Gln Leu Lys Asp Leu Arg Glu Thr Thr Glu Asn Leu Val Tyr  
85 90 95

Ser Leu Lys Met Tyr Leu Ser Phe Val Cys His Ser Pro Glu Glu Asp  
 100 105 110

Gly Val Lys Val Asp Val Ile Met Val Phe Gln Phe Pro Ser Thr Glu  
115 120 125

Gln Arg Ala Val Arg Glu Lys Lys Ile Gln Ser Ile Leu Asn Gln Lys  
130 135 140

Ile Arg Asn Leu Arg Ala Leu Pro Ile Asn Ala Ser Ser Val Gln Val  
145 . . . . . 150 . . . . . 155 . . . . . 160

Asn Val Ala Met Val Lys Asn Gly Asn Val Gly Pro Gly Ser Gly Ala  
165 170 175

Gly Glu Ala Pro Gly Leu Gly Ala Gly Pro Ala Trp Ser Pro Met Ser  
 180 185 190

Ser Ser Thr Gly Glu Leu Thr Val Gln Ala Ser Cys Gly Lys Arg Val  
195 200 205

Val Pro Leu Asn Val Asn Arg Ile Ala Ser Gly Val Ile Ala Pro Lys  
210 215 220

Ala Ala Trp Pro Trp Gln Ala Ser Leu Gln Tyr Asp Asn Ile His Gln  
225 230 235 240

150

Cys Gly Ala Thr Leu Ile Ser Asn Thr Trp Leu Val Thr Ala Ala His  
245 250 255

Cys Phe Gln Lys Tyr Lys Asn Pro His Gln Trp Thr Val Ser Phe Gly  
260 265 270

Thr Lys Ile Asn Pro Pro Leu Met Lys Arg Asn Val Arg Arg Phe Ile  
275 280 285

Ile His Glu Lys Tyr Arg Ser Ala Ala Arg Glu Tyr Asp Ile Ala Val  
290 295 300

Val Gln Val Ser Ser Arg Val Thr Phe Ser Asp Asp Ile Arg Gln Ile  
305 310 315 320

Cys Leu Pro Glu Ala Ser Ala Ser Phe Gln Pro Asn Leu Thr Val His  
325 330 335

Ile Thr Gly Phe Gly Ala Leu Tyr Tyr Gly Gly Glu Ser Gln Asn Asp  
340 345 350

Leu Arg Glu Ala Arg Val Lys Ile Ile Ser Asp Asp Val Cys Lys Gln  
355 360 365

Pro Gln Val Tyr Gly Asn Asp Ile Lys Pro Gly Met Phe Cys Ala Gly  
370 375 380

Tyr Met Glu Gly Ile Tyr Asp Ala Cys Arg Gly Asp Ser Gly Gly Pro  
385 390 395 400

Leu Val Thr Arg Asp Leu Lys Asp Thr Trp Tyr Leu Ile Gly Ile Val  
405 410 415

Ser Trp Gly Asp Asn Cys Gly Gln Lys Asp Lys Pro Gly Val Tyr Thr  
420 425 430

Gln Val Thr Tyr Tyr Arg Asn Trp Ile Ala Ser Lys Thr Gly Ile  
435 440 445

<210> 110

<211> 457

<212> PRT

<213> Homo sapiens

<400> 110

Met Ser Leu Met Leu Asp Asp Gln Pro Pro Met Glu Ala Gln Tyr Ala  
1 5 10 15

Glu Glu Gly Pro Gly Pro Gly Ile Phe Arg Ala Glu Pro Gly Asp Gln  
20 25 30

Gln His Pro Ile Ser Gln Ala Val Cys Trp Arg Ser Met Arg Arg Gly  
35 40 45

Cys Ala Val Leu Gly Ala Leu Gly Leu Leu Ala Gly Ala Gly Val Gly  
50 55 60

Ser Trp Leu Leu Val Leu Tyr Leu Cys Pro Ala Ala Ser Gln Pro Ile  
 65 70 75 80

Ser Gly Thr Leu Gln Asp Glu Glu Ile Thr Leu Ser Cys Ser Glu Ala  
 85 90 95

Ser Ala Glu Glu Ala Leu Leu Pro Ala Leu Pro Lys Thr Val Ser Phe  
 100 105 110

Arg Ile Asn Ser Glu Asp Phe Leu Leu Glu Ala Gln Val Arg Asp Gln  
 115 120 125

Pro Arg Trp Leu Leu Val Cys His Glu Gly Trp Ser Pro Ala Leu Gly  
 130 135 140

Leu Gln Ile Cys Trp Ser Leu Gly His Leu Arg Leu Thr His His Lys  
 145 150 155 160

Gly Val Asn Leu Thr Asp Ile Lys Leu Asn Ser Ser Gln Glu Phe Ala  
 165 170 175

Gln Leu Ser Pro Arg Leu Gly Gly Phe Leu Glu Glu Ala Trp Gln Pro  
 180 185 190

Arg Asn Asn Cys Thr Ser Gly Gln Val Val Ser Leu Arg Cys Ser Glu  
 195 200 205

Cys Gly Ala Arg Pro Leu Ala Ser Arg Ile Val Gly Gly Gln Ser Val  
 210 215 220

Ala Pro Gly Arg Trp Pro Trp Gln Ala Ser Val Ala Leu Gly Phe Arg  
 225 230 235 240

His Thr Cys Gly Gly Ser Val Leu Ala Pro Arg Trp Val Val Thr Ala  
 245 250 255

Ala His Cys Met His Ser Phe Arg Leu Ala Arg Leu Ser Ser Trp Arg  
 260 265 270

Val His Ala Gly Leu Val Ser His Ser Ala Val Arg Pro His Gln Gly  
 275 280 285

Ala Leu Val Glu Arg Ile Ile Pro His Pro Leu Tyr Ser Ala Gln Asn  
 290 295 300

His Asp Tyr Asp Val Ala Leu Leu Arg Leu Gln Thr Ala Leu Asn Phe  
 305 310 315 320

Ser Asp Thr Val Gly Ala Val Cys Leu Pro Ala Lys Glu Gln His Phe  
 325 330 335

Pro Lys Gly Ser Arg Cys Trp Val Ser Gly Trp Gly His Thr His Pro  
 340 345 350

Ser His Thr Tyr Ser Ser Asp Met Leu Gln Asp Thr Val Val Pro Leu  
 355 360 365

Phe Ser Thr Gln Leu Cys Asn Ser Ser Cys Val Tyr Ser Gly Ala Leu  
 370 375 380

Thr Pro Arg Met Leu Cys Ala Gly Tyr Leu Asp Gly Arg Ala Asp Ala  
 385 390 395 400

Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Cys Pro Asp Gly Asp Thr  
 405 410 415

Trp Arg Leu Val Gly Val Val Ser Trp Gly Arg Ala Cys Ala Glu Pro  
 420 425 430

Asn His Pro Gly Val Tyr Ala Lys Val Ala Glu Phe Leu Asp Trp Ile  
 435 440 445

His Asp Thr Ala Gln Asp Ser Leu Leu  
 450 455

<210> 111

<211> 818

<212> PRT

<213> Homo sapiens

<400> 111

Met Ala Arg His Leu Leu Leu Pro Leu Val Met Leu Val Ile Ser Pro  
 1 5 10 15

Ile Pro Gly Ala Phe Gln Asp Ser Ala Leu Ser Pro Thr Gln Glu Glu  
 20 25 30

Pro Glu Asp Leu Asp Cys Gly Arg Pro Glu Pro Ser Ala Arg Ile Val  
 35 40 45

Gly Gly Ser Asn Ala Gln Pro Gly Thr Trp Pro Trp Gln Val Ser Leu  
 50 55 60

His His Gly Gly His Ile Cys Gly Gly Ser Leu Ile Ala Pro Ser  
 65 70 75 80

Trp Val Leu Ser Ala Ala His Cys Phe Met Thr Asn Gly Thr Leu Glu  
 85 90 95

Pro Ala Ala Glu Trp Ser Val Leu Leu Gly Val His Ser Gln Asp Gly  
 100 105 110

Pro Leu Asp Gly Ala His Thr Arg Ala Val Ala Ala Ile Val Val Pro  
 115 120 125

Ala Asn Tyr Ser Gln Val Glu Leu Gly Ala Asp Leu Ala Leu Leu Arg  
 130 135 140

Leu Ala Ser Pro Ala Ser Leu Gly Pro Ala Val Trp Pro Val Cys Leu  
 145 150 155 160

Pro Arg Ala Ser His Arg Phe Val His Gly Thr Ala Cys Trp Ala Thr  
 165 170 175

Gly Trp Gly Asp Val Gln Glu Ala Asp Pro Leu Pro Leu Pro Trp Val  
 180 185 190  
 Leu Gln Glu Val Glu Leu Arg Leu Leu Gly Glu Ala Thr Cys Gln Cys  
 195 200 205  
 Leu Tyr Ser Gln Pro Gly Pro Phe Asn Leu Thr Leu Gln Ile Leu Pro  
 210 215 220  
 Gly Met Leu Cys Ala Gly Tyr Pro Glu Gly Arg Arg Asp Thr Cys Gln  
 225 230 235 240  
 Gly Asp Ser Gly Gly Pro Leu Val Cys Glu Glu Gly Arg Trp Phe  
 245 250 255  
 Gln Ala Gly Ile Thr Ser Phe Gly Phe Gly Cys Gly Arg Arg Asn Arg  
 260 265 270  
 Pro Gly Val Phe Thr Ala Val Ala Thr Tyr Glu Ala Trp Ile Arg Glu  
 275 280 285  
 Gln Val Met Gly Ser Glu Pro Gly Pro Ala Phe Pro Thr Gln Pro Gln  
 290 295 300  
 Lys Thr Gln Ser Asp Pro Gln Glu Pro Arg Glu Glu Asn Cys Thr Ile  
 305 310 315 320  
 Ala Leu Pro Glu Cys Gly Lys Ala Pro Arg Pro Gly Ala Trp Pro Trp  
 325 330 335  
 Glu Ala Gln Val Met Val Pro Gly Ser Arg Pro Cys His Gly Ala Leu  
 340 345 350  
 Val Ser Glu Ser Trp Val Leu Ala Pro Ala Ser Cys Phe Leu Asp Pro  
 355 360 365  
 Asn Ser Ser Asp Ser Pro Pro Arg Asp Leu Asp Ala Trp Arg Val Leu  
 370 375 380  
 Leu Pro Ser Arg Pro Arg Ala Glu Arg Val Ala Arg Leu Val Gln His  
 385 390 395 400  
 Glu Asn Ala Ser Trp Asp Asn Ala Ser Asp Leu Ala Leu Leu Gln Leu  
 405 410 415  
 Arg Thr Pro Val Asn Leu Ser Ala Ala Ser Arg Pro Val Cys Leu Pro  
 420 425 430  
 His Pro Glu His Tyr Phe Leu Pro Gly Ser Arg Cys Arg Leu Ala Arg  
 435 440 445  
 Trp Gly Arg Gly Glu Pro Ala Leu Gly Pro Gly Ala Leu Leu Glu Ala  
 450 455 460  
 Glu Leu Leu Gly Gly Trp Trp Cys His Cys Leu Tyr Gly Arg Gln Gly  
 465 470 475 480

Ala Ala Val Pro Leu Pro Gly Asp Pro Pro His Ala Leu Cys Pro Ala  
 485 490 495

Tyr Gln Glu Lys Glu Glu Val Gly Ser Cys Trp Thr His Gly Pro Trp  
 500 505 510

Ile Ser His Val Thr Arg Gly Ala Tyr Leu Glu Asp Gln Leu Ala Trp  
 515 520 525

Asp Trp Gly Pro Asp Gly Glu Glu Thr Glu Thr Gln Thr Cys Pro Pro  
 530 535 540

His Thr Glu His Gly Ala Cys Gly Leu Arg Leu Glu Ala Ala Pro Val  
 545 550 555 560

Gly Val Leu Trp Pro Trp Leu Ala Glu Val His Val Ala Gly Asp Arg  
 565 570 575

Val Cys Thr Gly Ile Leu Leu Ala Pro Gly Trp Val Leu Ala Ala Thr  
 580 585 590

His Cys Val Leu Arg Pro Gly Ser Thr Thr Val Pro Tyr Ile Glu Val  
 595 600 605

Tyr Leu Gly Arg Ala Gly Ala Ser Ser Leu Pro Gln Gly His Gln Val  
 610 615 620

Ser Arg Leu Val Ile Ser Ile Arg Leu Pro Gln His Leu Gly Leu Arg  
 625 630 635 640

Pro Pro Leu Ala Leu Leu Glu Leu Ser Ser Arg Val Glu Pro Ser Pro  
 645 650 655

Ser Ala Leu Pro Ile Cys Leu His Pro Ala Gly Ile Pro Pro Gly Ala  
 660 665 670

Ser Cys Trp Val Leu Gly Trp Lys Glu Pro Gln Asp Arg Val Pro Val  
 675 680 685

Ala Ala Ala Val Ser Ile Leu Thr Gln Arg Ile Cys Asp Cys Leu Tyr  
 690 695 700

Gln Gly Ile Leu Pro Pro Gly Thr Leu Cys Val Leu Tyr Ala Glu Gly  
 705 710 715 720

Gln Glu Asn Arg Cys Glu Met Thr Ser Ala Pro Pro Leu Leu Cys Gln  
 725 730 735

Met Thr Glu Gly Ser Trp Ile Leu Val Gly Met Ala Val Gln Gly Ser  
 740 745 750

Arg Glu Leu Phe Ala Ala Ile Gly Pro Glu Glu Ala Trp Ile Ser Gln  
 755 760 765

Thr Val Gly Glu Ala Asn Phe Leu Pro Pro Ser Gly Ser Pro His Trp  
 770 775 780

Pro Thr Gly Gly Ser Asn Leu Cys Pro Pro Glu Leu Ala Lys Ala Ser  
 785 790 795 800

Gly Ser Pro His Ala Val Tyr Phe Leu Leu Leu Leu Thr Leu Leu Ile  
 805 810 815

Gln Ser

<210> 112

<211> 284

<212> PRT

<213> Homo sapiens

<400> 112

Ala Met Gly Leu Gly Leu Arg Gly Trp Gly Arg Pro Leu Leu Thr Val  
 1 5 10 15

Ala Thr Ala Leu Met Leu Pro Val Lys Pro Pro Ala Gly Ser Trp Gly  
 20 25 30

Ala Gln Ile Ile Gly Gly His Glu Val Thr Pro His Ser Arg Pro Tyr  
 35 40 45

Met Ala Ser Val Arg Phe Gly Gly Gln His His Cys Gly Gly Phe Leu  
 50 55 60

Leu Arg Ala Arg Trp Val Val Ser Ala Ala His Cys Phe Ser His Arg  
 65 70 75 80

Asp Leu Arg Thr Gly Leu Val Val Leu Gly Ala His Val Leu Ser Thr  
 85 90 95

Ala Glu Pro Thr Gln Gln Val Phe Gly Ile Asp Ala Leu Thr Thr His  
 100 105 110

Pro Asp Tyr His Pro Met Thr His Ala Asn Asp Ile Cys Leu Leu Gln  
 115 120 125

Leu Asn Gly Ser Ala Val Leu Gly Pro Ala Val Gly Leu Leu Arg Leu  
 130 135 140

Pro Gly Arg Arg Ala Arg Pro Pro Thr Ala Gly Thr Arg Cys Arg Val  
 145 150 155 160

Ala Gly Trp Gly Phe Val Ser Asp Phe Glu Glu Leu Pro Pro Gly Leu  
 165 170 175

Met Glu Ala Lys Val Arg Val Leu Asp Pro Asp Val Cys Asn Ser Ser  
 180 185 190

Trp Lys Gly His Leu Thr Leu Thr Met Leu Cys Thr Arg Ser Gly Asp  
 195 200 205

Ser His Arg Arg Gly Phe Cys Ser Ala Asp Ser Gly Gly Pro Leu Val  
 210 215 220

Cys Arg Asn Arg Ala His Gly Leu Val Ser Phe Ser Gly Leu Trp Cys  
 225 230 235 240

Gly Asp Pro Lys Thr Pro Asp Val Tyr Thr Gln Val Ser Ala Phe Val  
 245 250 255

Ala Trp Ile Trp Asp Val Val Arg Arg Ser Ser Pro Gln Pro Gly Pro  
 260 265 270

Leu Pro Gly Thr Thr Arg Pro Pro Gly Glu Ala Ala  
 275 280

<210> 113

<211> 802

<212> PRT

<213> Homo sapiens

<400> 113

Met Pro Val Ala Glu Ala Pro Gln Val Ala Gly Gly Gln Gly Asp Gly  
 1 5 10 15

Gly Asp Gly Glu Glu Ala Glu Pro Glu Gly Met Phe Lys Ala Cys Glu  
 20 25 30

Asp Ser Lys Arg Lys Ala Arg Gly Tyr Leu Arg Leu Val Pro Leu Phe  
 35 40 45

Val Leu Leu Ala Leu Leu Val Leu Ala Ser Ala Gly Val Leu Leu Trp  
 50 55 60

Tyr Phe Leu Gly Tyr Lys Ala Glu Val Met Val Ser Gln Val Tyr Ser  
 65 70 75 80

Gly Ser Leu Arg Val Leu Asn Arg His Phe Ser Gln Asp Leu Thr Arg  
 85 90 95

Arg Glu Ser Ser Ala Phe Arg Ser Glu Thr Ala Lys Ala Gln Lys Met  
 100 105 110

Leu Lys Glu Leu Ile Thr Ser Thr Arg Leu Gly Thr Tyr Tyr Asn Ser  
 115 120 125

Ser Ser Val Tyr Ser Phe Gly Glu Gly Pro Leu Thr Cys Phe Phe Trp  
 130 135 140

Phe Ile Leu Gln Ile Pro Glu His Arg Arg Leu Met Leu Ser Pro Glu  
 145 150 155 160

Val Val Gln Ala Leu Leu Val Glu Glu Leu Leu Ser Thr Val Asn Ser  
 165 170 175

Ser Ala Ala Val Pro Tyr Arg Ala Glu Tyr Glu Val Asp Pro Glu Gly  
 180 185 190

Leu Val Ile Leu Glu Ala Ser Val Lys Asp Ile Ala Ala Leu Asn Ser  
 195 200 205

Thr Leu Gly Cys Tyr Arg Tyr Ser Tyr Val Gly Gln Gly Gln Val Leu  
 210 215 220

Arg Leu Lys Gly Pro Asp His Leu Ala Ser Ser Cys Leu Trp His Leu  
 225 230 235 240

Gln Gly Pro Lys Asp Leu Met Leu Lys Leu Arg Leu Glu Trp Thr Leu  
 245 250 255

Ala Glu Cys Arg Asp Arg Leu Ala Met Tyr Asp Val Ala Gly Pro Leu  
 260 265 270

Glu Lys Arg Leu Ile Thr Ser Val Tyr Gly Cys Ser Arg Gln Glu Pro  
 275 280 285

Val Val Glu Val Leu Ala Ser Gly Ala Ile Met Ala Val Val Trp Lys  
 290 295 300

Lys Gly Leu His Ser Tyr Tyr Asp Pro Phe Val Leu Ser Val Gln Pro  
 305 310 315 320

Val Val Phe Gln Ala Cys Glu Val Asn Leu Thr Leu Asp Asn Arg Leu  
 325 330 335

Asp Ser Gln Gly Val Leu Ser Thr Pro Tyr Phe Pro Ser Tyr Tyr Ser  
 340 345 350

Pro Gln Thr His Cys Ser Trp His Leu Thr Val Pro Ser Leu Asp Tyr  
 355 360 365

Gly Leu Ala Leu Trp Phe Asp Ala Tyr Ala Leu Arg Arg Gln Lys Tyr  
 370 375 380

Asp Leu Pro Cys Thr Gln Gly Gln Trp Thr Ile Gln Asn Arg Arg Leu  
 385 390 395 400

Cys Gly Leu Arg Ile Leu Gln Pro Tyr Ala Glu Arg Ile Pro Val Val  
 405 410 415

Ala Thr Ala Gly Ile Thr Ile Asn Phe Thr Ser Gln Ile Ser Leu Thr  
 420 425 430

Gly Pro Gly Val Arg Val His Tyr Gly Leu Tyr Asn Gln Ser Asp Pro  
 435 440 445

Cys Pro Gly Glu Phe Leu Cys Ser Val Asn Gly Leu Cys Val Pro Ala  
 450 455 460

Cys Asp Gly Val Lys Asp Cys Pro Asn Gly Leu Asp Glu Arg Asn Cys  
 465 470 475 480

Val Cys Arg Ala Thr Phe Gln Cys Lys Glu Asp Ser Thr Cys Ile Ser  
 485 490 495

Leu Pro Lys Val Cys Asp Gly Gln Pro Asp Cys Leu Asn Gly Ser Asp  
 500 505 510

Glu Glu Gln Cys Gln Glu Gly Val Pro Cys Gly Thr Phe Thr Phe Gln  
 515 520 525

Cys Glu Asp Arg Ser Cys Val Lys Lys Pro Asn Pro Gln Cys Asp Gly  
 530 535 540

Arg Pro Asp Cys Arg Asp Gly Ser Asp Glu Glu His Cys Asp Cys Gly  
 545 550 555 560

Leu Gln Gly Pro Ser Ser Arg Ile Val Gly Gly Ala Val Ser Ser Glu  
 565 570 575

Gly Glu Trp Pro Trp Gln Ala Ser Leu Gln Val Arg Gly Arg His Ile  
 580 585 590

Cys Gly Gly Ala Leu Ile Ala Asp Arg Trp Val Ile Thr Ala Ala His  
 595 600 605

Cys Phe Gln Glu Asp Ser Met Ala Ser Thr Val Leu Trp Thr Val Phe  
 610 615 620

Leu Gly Lys Val Trp Gln Asn Ser Arg Trp Pro Gly Glu Val Ser Phe  
 625 630 635 640

Lys Val Ser Arg Leu Leu Leu His Pro Tyr His Glu Glu Asp Ser His  
 645 650 655

Asp Tyr Asp Val Ala Leu Leu Gln Leu Asp His Pro Val Val Arg Ser  
 660 665 670

Ala Ala Val Arg Pro Val Cys Leu Pro Ala Arg Ser His Phe Phe Glu  
 675 680 685

Pro Gly Leu His Cys Trp Ile Thr Gly Trp Gly Ala Leu Arg Glu Gly  
 690 695 700

Gly Pro Ile Ser Asn Ala Leu Gln Lys Val Asp Val Gln Leu Ile Pro  
 705 710 715 720

Gln Asp Leu Cys Ser Glu Ala Tyr Arg Tyr Gln Val Thr Pro Arg Met  
 725 730 735

Leu Cys Ala Gly Tyr Arg Lys Gly Lys Lys Asp Ala Cys Gln Gly Asp  
 740 745 750

Ser Gly Gly Pro Leu Val Cys Lys Ala Leu Ser Gly Arg Trp Phe Leu  
 755 760 765

Ala Gly Leu Val Ser Trp Gly Leu Gly Cys Gly Arg Pro Asn Tyr Phe  
 770 775 780

Gly Val Tyr Thr Arg Ile Thr Gly Val Ile Ser Trp Ile Gln Gln Val  
 785 790 795 800

Val Thr

<210> 114  
 <211> 359  
 <212> PRT  
 <213> Homo sapiens

<400> 114  
 Asp Leu Pro Pro Ser Cys Ser Pro Ala Ser Lys Met Arg Leu Gly Leu  
 1 5 10 15

Leu Ser Val Ala Leu Leu Phe Val Gly Ser Ser His Leu Tyr Ser Asp  
 20 25 30

His Tyr Ser Pro Ser Gly Arg His Arg Leu Gly Pro Ser Pro Glu Pro  
 35 40 45

Ala Ala Ser Ser Gln Gln Ala Glu Ala Val Arg Lys Arg Leu Arg Arg  
 50 55 60

Arg Arg Glu Gly Gly Ala His Ala Lys Asp Cys Gly Thr Ala Pro Leu  
 65 70 75 80

Lys Asp Val Leu Gln Gly Ser Arg Ile Ile Gly Gly Thr Glu Ala Gln  
 85 90 95

Ala Gly Ala Trp Pro Trp Val Val Ser Leu Gln Ile Lys Tyr Gly Arg  
 100 105 110

Val Leu Val His Val Cys Gly Gly Thr Leu Val Arg Glu Arg Trp Val  
 115 120 125

Leu Thr Ala Ala His Cys Thr Lys Asp Thr Ser Asp Pro Leu Met Trp  
 130 135 140

Thr Ala Val Ile Gly Thr Asn Asn Ile His Gly Arg Tyr Pro His Thr  
 145 150 155 160

Lys Lys Ile Lys Ile Lys Ala Ile Ile Ile His Pro Asn Phe Ile Leu  
 165 170 175

Glu Ser Tyr Val Asn Asp Ile Ala Leu Phe His Leu Lys Lys Ala Val  
 180 185 190

Arg Tyr Asn Asp Tyr Ile Gln Pro Ile Cys Leu Pro Phe Asp Val Phe  
 195 200 205

Gln Ile Leu Asp Gly Asn Thr Lys Cys Phe Ile Ser Gly Trp Gly Arg  
 210 215 220

Thr Lys Glu Glu Gly Asn Ala Thr Asn Ile Leu Gln Asp Ala Glu Val  
 225 230 235 240

His Tyr Ile Ser Arg Glu Met Cys Asn Ser Glu Arg Ser Tyr Gly Gly  
 245 250 255

Ile Ile Pro Asn Thr Ser Phe Cys Ala Gly Asp Glu Asp Gly Ala Phe  
 260 265 270

Asp Thr Cys Arg Gly Asp Ser Gly Gly Pro Leu Met Cys Tyr Leu Pro  
 275 280 285

Glu Tyr Lys Arg Phe Phe Val Met Gly Ile Thr Ser Tyr Gly His Gly  
 290 295 300

Cys Gly Arg Arg Gly Phe Pro Gly Val Tyr Ile Gly Pro Ser Phe Tyr  
 305 310 315 320

Gln Lys Trp Leu Thr Glu His Phe Phe His Ala Ser Thr Gln Gly Ile  
 325 330 335

Leu Thr Ile Asn Ile Leu Arg Gly Gln Ile Leu Ile Ala Leu Cys Phe  
 340 345 350

Val Ile Leu Leu Ala Thr Thr  
 355

<210> 115

<211> 288

<212> PRT

<213> Homo sapiens

<400> 115

Ser Pro Pro Gln Pro Arg Thr Pro Asp Cys Arg Leu Gln Ala Ser Leu  
 1 5 10 15

Glu Ala Leu Ala Thr Leu Ala Pro Gln Pro Ser Asp Trp Leu Cys Phe  
 20 25 30

Ala Asp Leu Gly Trp Phe Glu Ala Asp Gly Ala Ala His Ser Met Gly  
 35 40 45

Leu Gly Ser Ser Leu Lys Trp Ala Trp Ala Lys Pro Ser Gly Met Pro  
 50 55 60

Val Pro Glu Asn Asp Leu Val Gly Ile Val Gly Gly His Asn Ala Pro  
 65 70 75 80

Pro Gly Lys Trp Pro Trp Gln Val Ser Leu Arg Val Tyr Ser Tyr His  
 85 90 95

Trp Ala Ser Trp Ala His Ile Cys Gly Gly Ser Leu Ile His Pro Gln  
 100 105 110

Trp Val Leu Thr Ala Ala His Cys Ile Phe Trp Lys Asp Thr Asp Pro  
 115 120 125

Ser Ile Tyr Arg Ile His Ala Gly Asp Val Tyr Leu Tyr Gly Gly Arg  
 130 135 140

Gly Leu Leu Asn Val Ser Arg Ile Ile Val His Pro Asn Tyr Val Thr  
 145 150 155 160

Ala Gly Leu Gly Ala Asp Val Ala Leu Leu Gln Leu Pro Gly Ser Pro  
 165 170 175

Leu Ser Pro Glu Ser Leu Pro Pro Pro Tyr Arg Leu Gln Gln Ala Ser  
 180 185 190  
 Val Gln Val Leu Glu Asn Ala Val Cys Glu Gln Pro Tyr Arg Asn Ala  
 195 200 205  
 Ser Gly His Thr Gly Asp Arg Gln Leu Ile Leu Asp Asp Met Leu Cys  
 210 215 220  
 Ala Gly Ser Glu Gly Arg Asp Ser Cys Tyr Gly Asp Ser Gly Gly Pro  
 225 230 235 240  
 Leu Val Cys Arg Leu Arg Gly Ser Trp Arg Leu Val Gly Val Val Ser  
 245 250 255  
 Trp Gly Tyr Gly Cys Thr Leu Arg Asp Phe Pro Gly Val Tyr Thr His  
 260 265 270  
 Val Gln Ile Tyr Val Leu Trp Ile Leu Gln Gln Val Gly Glu Leu Pro  
 275 280 285

&lt;210&gt; 116

&lt;211&gt; 45

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 116

Ile Ile Gly Gly His Glu Val Thr Pro His Ser Arg Pro Tyr Met Ala  
 1 5 10 15

Ser Val Arg Phe Gly Gly Gln His His Cys Gly Gly Phe Leu Leu Arg  
 20 25 30

Ala Arg Trp Val Val Ser Ala Ala Gln Cys Phe Ser His  
 35 40 45

&lt;210&gt; 117

&lt;211&gt; 46

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 117

Gly Asp Ser Gly Gly Pro Leu Val Cys Glu Leu Asn Gly Thr Trp Val  
 1 5 10 15

Gln Val Gly Ile Val Ser Trp Gly Ile Gly Cys Gly Arg Lys Gly Tyr  
 20 25 30

Pro Gly Val Tyr Thr Glu Val Ser Phe Tyr Lys Lys Trp Ile  
 35 40 45

<210> 118  
 <211> 309  
 <212> PRT  
 <213> Homo sapiens

<400> 118  
 Met Ala Gly Glu Gln Val Thr Ala Asn Val Ser Arg Tyr Pro Gly Gln  
 1 5 10 15  
 Lys Thr Met Ser Phe Pro Glu Lys Thr Phe Leu Leu Ser Tyr Arg Ala  
 20 25 30  
 Ser Leu Leu Ala Val Val Thr His Arg Ser Asn Asn Ser Arg Gly Arg  
 35 40 45  
 Ala Phe Glu Ser Gln Val Leu Pro Asp Leu Thr Ala Gly Asp Ala Ala  
 50 55 60  
 Asp Pro Pro Ile Pro Pro Leu Gly Pro Gly Ala Ala Leu Leu Lys Ser  
 65 70 75 80  
 Gly Pro Phe Arg Ile Trp Gln Gly Val Lys Thr Lys Gly Glu Gly  
 85 90 95  
 Asp Arg Asp Thr Gly Thr Ala Gly Tyr Ala Phe Thr Leu Leu Leu  
 100 105 110  
 Leu Gly Ile Ser Gly Glu Pro Pro Glu Trp Val Cys Gly Arg Pro Thr  
 115 120 125  
 Val Ser Ser Gly Ile Ala Ser Gly Leu Gly Ala Ser Val Gly Gln Trp  
 130 135 140  
 Pro Trp Gln Val Ser Ile Arg Gln Gly Leu Ile His Val Cys Ser Asp  
 145 150 155 160  
 Thr Leu Ile Ser Glu Glu Trp Val Leu Thr Val Ala Ile Cys Phe Pro  
 165 170 175  
 Leu Ser Pro His Pro Asp Phe Gln Ala Asn Thr Ser Ser Ala Ile Ala  
 180 185 190  
 Val Val Glu Leu Pro Ser Pro Val Ser Val Ser Pro Val Val Leu Leu  
 195 200 205  
 Ile Cys Leu Pro Ser Ser Glu Val Tyr Leu Lys Lys Asn Thr Thr Ser  
 210 215 220  
 Cys Trp Val Thr Gly Trp Gly Tyr Thr Gly Ile Phe Gln Tyr Ile Lys  
 225 230 235 240  
 Arg Ser Tyr Thr Leu Lys Glu Leu Lys Val Pro Leu Ile Asp Leu Gln  
 245 250 255  
 Thr Cys Gly Asp His Tyr Gln Asn Glu Ile Leu Leu His Gly Val Glu  
 260 265 270

Leu Ile Ile Ser Glu Ala Met Ile Cys Ser Lys Leu Pro Val Gly Gln  
275 280 285

Met Asp Gln Cys Thr Val Arg Ile His Pro Ser Gly Thr Phe His Arg  
290 295 300

Pro Cys Leu Pro Gln  
305

<210> 119  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: SNP

<400> 119  
agaaggccta ygaagggg 18

<210> 120  
<211> 22  
<212> DNA  
<213> Homo sapiens

<400> 120  
gctgctgctg ctgctggtgc ag 22

<210> 121  
<211> 19  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: SNP

<400> 121  
ctacccttagc ygaggaaga 19

<210> 122  
<211> 15  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: SNP

<400> 122  
tggaatarct cggac 15

<210> 123  
<211> 18  
<212> DNA

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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: SNP

<400> 123
tggtaatccg kgttagagg                                18

<210> 124
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: SNP

<400> 124
agagaaatay gagggatt                                19

<210> 125
<211> 21
<212> DNA
<213> Homo sapiens

<400> 125
ggtgtggcatc atcagctggg g                                21

<210> 126
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: SNP

<400> 126
tagggatga ycacctgct                                19

<210> 127
<211> 14
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: SNP

<400> 127
gccggacsac tcgc                                14

<210> 128
<211> 19
<212> DNA
<213> Artificial Sequence

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<220>  
<223> Description of Artificial Sequence: SNP

<400> 128  
gagcatctgc vggagagag 19

<210> 129  
<211> 15  
<212> DNA  
<213> Homo sapiens

<400> 129  
tggagakaag aacac 15

<210> 130  
<211> 17  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: SNP

<400> 130  
gctctaccwc cacgccc 17

<210> 131  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: SNP

<400> 131  
cgcacctgct cyaccaccac 20

<210> 132  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: SNP

<400> 132  
ctgccagaag gayggagcct gg 22

<210> 133  
<211> 16  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: SNP

<400> 133  
gtctgccara aggacg 16

<210> 134  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: SNP

<400> 134  
gggtgactct ggmggccccc t 21

<210> 135  
<211> 17  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: SNP

<400> 135  
tgcatgggyg actctgg 17

<210> 136  
<211> 16  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: SNP

<400> 136  
gccgtgarca ccactg 16

<210> 137  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: SNP

<400> 137  
agcggccasc attggcgt 18

<210> 138  
<211> 18  
<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: SNP

<400> 138

gacatggawg tggacgac

18

<210> 139

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: SNP

<400> 139

acaattttt y gagtgccca

19

<210> 140

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: SNP

<400> 140

acatacgcrc gatttgtttg

20

<210> 141

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: SNP

<400> 141

tgggagcrgg tcctgcct

18

<210> 142

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: SNP

<400> 142

ctgcagccct a y g c c g a g a g g

21

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<210> 143
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: SNP

<400> 143
agcgaggyct atcgcta 17

<210> 144
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: SNP

<400> 144
gggcgcatgc aragg 15

<210> 145
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: SNP

<400> 145
ccactgcact aaagacrccta g 21

<210> 146
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      peptide

<220>
<221> MOD_RES
<222> (1)
<223> pGlu

<400> 146
Glu Arg Thr Lys Arg
  1           5

<210> 147
<211> 20
<212> DNA

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<213> Artificial Sequence  
 <220>  
 <223> Description of Artificial Sequence: Primer  
 <400> 147  
 ggagctgtcg tattccagtc

20

<210> 148  
 <211> 21  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Description of Artificial Sequence: Primer  
 <400> 148  
 aaccctcaa gaccgttt a g

21

<210> 149  
 <211> 6  
 <212> PRT  
 <213> Artificial Sequence  
 <220>  
 <223> Description of Artificial Sequence: His tag  
 <400> 149  
 His His His His His His  
 1 5

<210> 150  
 <211> 16  
 <212> DNA  
 <213> Artificial Sequence  
 <220>  
 <223> Description of Artificial Sequence: Synthetic  
 illustrative DNA

<220>  
 <221> modified\_base  
 <222> (15)  
 <223> a, c, g, t or any

<220>  
 <221> modified\_base  
 <222> (16)  
 <223> a, c, g or t

<400> 150  
 gatcrywskm bvdhnn

16